

**COMMUNITY AFFAIRS**

**DIVISION OF CODES AND STANDARDS**

**Uniform Construction Code**

**Building and Electrical Subcodes**

**Proposed Amendments: N.J.A.C. 5:23-2.15, 2.20, 3.14, 3.16, 3.21, and 12.12**

Authorized by: Susan Bass Levin, Commissioner, Department of Community Affairs

Authority: N.J.S.A. 52:27D-124

Proposal Number: PRN 2002-

Calendar: See Summary below for explanation of exception to calendar requirement.

Submit written comments by: \_\_\_\_\_, 2003 to:

Michael L. Ticktin, Esq.

Chief, Legislative Analysis

Department of Community Affairs

PO Box 802

Trenton, NJ 08625-0802

Fax Number: (609) 633-6729

---

**Susan Bass Levin,  
Commissioner**

The agency proposal follows:

### **Summary**

Under the State Uniform Construction Code (UCC) Act, the Commissioner of the Department of Community Affairs is charged, at N.J.S.A. 52:27D-123(b), with adopting model codes as part of the Uniform Construction Code. The UCC Act specifies the use of the model codes published by the Building Officials and Code Administrators (BOCA) International, Inc. and also provides that “the commissioner may adopt as a subcode a model code or standard of some other nationally recognized organization upon finding that such model code or standard promotes the purpose of this act.” (N.J.S.A. 52:27D-123(b))

In 1998, BOCA joined with the other two national model code organizations, the International Conference of Building Officials (ICBO) and the Southern Building Code Congress International (SBCCI), and in 2000 published a single model building code in two volumes, the International Building Code (IBC/2000) and International Residential Code (IRC/2000). These three national model code organizations will be fully merged into a single entity in early 2003.

The UCC Act provides for a State Uniform Construction Code in order to “encourage innovation and economy [and] to permit to the fullest extent feasible the use of modern technical methods, devices and improvements” (N.J.S.A. 52:27d-120(a) and (c)). To control the cost of construction, the UCC Act requires the Department to review new model codes and to adopt only those new provisions that are consistent with the intent and purpose of the UCC Act, which is to eliminate any unnecessarily restrictive or

obsolete code provisions that increase construction costs or that do not allow the use of newer, cost saving technology and to adequately protect the health, safety, and welfare of the people. The Department meets this charge by performing a review of the building subcode and the most recent model code (N.J.S.A. 52:27D-122(a), (b), and (c)).

The Department has reviewed the technical provisions of the building subcode and the IBC/2000 and IRC/2000 for consistency with the UCC Act. To facilitate this review process, the Department formed a volunteer review committee. The International Code Council (ICC) Advisory Committee was a well-balanced committee comprised of representatives from the construction industry, code officials, and consumer and safety advocates. Committee members were divided into technical working groups whose charge was to determine whether the IBC/2000 and IRC/2000 met the requirements of the UCC Act. These working groups, Administration and Appendices, Height and Area, Fire Suppression and Other Fire Issues, Residential Affordability, Wood Frame Construction, and Structural and Special Inspections, undertook a painstakingly thorough review of these ICC codes. Amendments to these codes were presented as recommendations to the Department. After the ICC Advisory Committee made its recommendations, the Department sought and received the advice of the Uniform Construction Code Advisory Board and its subcode committees.

The amendments to the IBC/2000 and IRC/2000 contained in this rule proposal reflect the advice of the ICC Advisory Committee and the Code Advisory Board. This rule proposal deletes the administrative provisions of the IBC/2000 and IRC/2000 contained in Chapter 1 of the IBC/2000 and IRC/2000 because the Uniform Construction

Code contains all the administrative requirements for enforcement of the UCC's technical subcodes.

Similarly, the Department reviewed the 2002 edition of the National Electrical Code (NEC/2002), the technical model code for the installation of electrical wiring and equipment, and is proposing its adoption.

Proposed technical amendments to the IBC/2000, NEC/2002, and IRC/2000 are summarized and discussed below. Issues 1-4 and Issue 150 contain proposed amendments to the Uniform Construction Code (N.J.A.C. 5:23); Issues 5-99 contain proposed amendments to the IBC/2000; Issues 100-110 contain proposed amendments to the NEC/2002; and Issues 111-149 contain proposed amendments to the IRC/2000. The Department is seeking particular public comments on Issue 26 (standpipes) and Issues 116, 137, and 139 (wind). In addition, the Department is working with BOCA to have a New Jersey edition of the IBC/2000 and IRC/2000 printed, which would facilitate the use of these codes by code users.

**1. At N.J.A.C. 5:23-2.14(b)4**, the proposed amendment would update cross-references to the provisions of the Uniform Construction Code for permits for temporary structures, which are necessary as a result of the proposed adoption of the IBC/2000.

**2. At N.J.A.C. 5:23-2.15(e)1x and (e)1x(1)**, the proposed amendments would include, as part of the Uniform Construction Code, a provision currently contained in Chapter 1 of the IBC/2000 that the design professional include a list of deferred submittals in the permit application. In addition, design professionals would be required to review all documents for these submittals and submit a letter indicating that the documents have

been reviewed and found to be in conformance with the regulations for the design of the building. Deferred submittals include such building items as fire suppression systems.

**3. At N.J.A.C. 5:23-2.20(a)**, the proposed amendment would narrow the scope of this section of the Uniform Construction Code to apply only to tests. As written, it applies to tests and special inspections. This section of the Uniform Construction Code would continue to require that tests be conducted with the supervision of the enforcing agency and that the costs associated with performing tests be borne by the owner or lessee or by the contractor performing the work. The reasons for deleting “special inspections” are provided in Issue 4 below.

**4. At N.J.A.C. 5:23-2.20(b)**, the proposed amendment would provide that special inspections apply only to Class I buildings and would amend the definition of a “special inspector” to require independence. The special inspection section of the IBC/2000 is more extensive than that of the 1996 Building Officials and Code Administrators (BOCA) National Building Code. New Jersey’s code officials regularly perform many of the inspections specified in the IBC/2000 (Section 1704, entitled “Special Inspections”) as requiring a special inspector. Therefore, this code provision is amended to provide for a special inspector only for Class I buildings. Class I includes very large buildings with unique structural designs that warrant the need for additional inspections. In addition, the definition of “special inspector” is amended to ensure independence from the contractor whose work is to be inspected. This independence is necessary to ensure objectivity.

#### **2000 International Building Code (IBC/2000)**

**5. At N.J.A.C. 5:23-3.14(a)1 and (a)2**, the amendments would propose the adoption of the IBC/2000 as the building subcode of the Uniform Construction Code. In addition, in

the IBC/2000 where there are any references to the 2000 edition of the International Residential Code, the 1998 edition of the International Code Council (ICC) A117.1, or the ICC Electrical Code, those references shall mean the building, barrier free, or electrical subcode, respectively.

**6. At N.J.A.C. 5:23-3.14(b),** the proposed amendment would delete the modifications made to the 1996 BOCA National Building Code and would propose the following modifications to the IBC/2000:

**7. At N.J.A.C. 5:23-3.14(b)1,** the proposed amendment would delete Chapter 1 of the IBC/2000 entitled, “Administration,” in its entirety because the Uniform Construction Code contains all of the administrative provisions for enforcing adopted technical subcodes in New Jersey. In addition, any section of Chapter 1 referenced in the IBC/2000 would be replaced with “the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23).”

**8. At N.J.A.C. 5:23-3.14(b)2,** the proposed amendments to Chapter 2 of the IBC/2000, entitled “Definitions,” would delete the definitions of “addition,” “alteration,” “historic building,” “existing structure,” and “repair” because these terms are defined in the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6. In addition, the proposed amendments would delete the definitions of “building,” “building official,” “owner,” and “structure” and would retain, in lieu thereof, the definitions that are contained in the Uniform Construction Code at N.J.A.C. 5:23-1.4. Furthermore, the proposed amendments would delete the definition of “building line,” which is a zoning, not a construction, term and would delete the definitions of “jurisdiction,” “permit,” and “person” because these terms are defined in Subchapter 2 of the Uniform Construction Code, entitled “Administration.”

Finally, in the definition of “agricultural buildings,” the proposed amendment would retain the cross-reference to N.J.A.C. 5:23-3.2(d) that is currently contained in the building subcode.

**9. At N.J.A.C. 5:23-3.14(b)3 and (b)4,** the proposed amendments to Section 302.3.3 of the IBC/2000, entitled “Separated uses,” would insert the requirements from the 1996 BOCA National Building Code for fire separation requirements for living spaces above garages because the IBC/2000 contains no such requirements. In addition, the proposed amendment to Table 302.3.3 of the IBC/2000, entitled “Required Separation of Occupancy (Hours)<sup>a</sup>,” would delete Use Group U (utility and miscellaneous). The IBC/2000 establishes requirements for Use Group U structures that are accessory to a residential occupancy. Similar requirements were deleted from the 1996 BOCA National Building Code because this use group determination results in code requirements that the Department believes are excessive. Therefore, the Department is proposing to retain the current requirements of the building subcode applicable to utility and miscellaneous uses.

In addition, because the residential definitions in the IBC/2000 are not completely in accordance with the New Jersey law on assisted living facilities, do not conform to the definitions in the Hotel and Multiple Dwelling Law (N.J.S.A. 55:13A-1 et seq) and its regulations (N.J.A.C. 5:10-1 et seq), and do not conform to the definitions in the Rooming and Boarding Home Act (N.J.S.A. 55:13B-1 et seq) and its regulations (N.J.A.C. 5:27-1 et seq), the proposed amendments would revise the definitions of “boarding house,” “adult care facility,” “child care facility,” “rooming house,” “single residential occupancy,” “therapeutic residence,” and “transient occupancy,” of Use Groups R-4, R-3, R-2, R-1, and I-1 to bring them into conformance with State law and to

provide clarity in the determination of a use group. In addition, these proposed amendments would change the occupancy classification of a childcare facility with 100 or fewer occupants from Use Group E to Use Group I-4 to maintain the current level of life safety.

Under the 1996 BOCA National Building Code, child care facilities that accommodate more than five children of 2 ½ years of age or less for any length of time are classified as Use Group I-2. In the IBC/2000, Use Group I-4, which consists of facilities that provide supervision and personal care on less than a 24 hour basis, is a new use group designation for day care—child or adult—facilities. This represents a change in occupancy classification and does not result in a reduction of life safety.

Finally, a new Use Group R-5 would be added to provide a use group designation for dwellings constructed in conformance with the IRC/2000. This designation will enable construction officials to distinguish between single-family dwellings constructed in compliance with the IBC/2000 (Use Group R-3) and those that are constructed in compliance with the IRC/2000 (Use Group R-5).

**10. At N.J.A.C. 5:23-3.14(b)5i,** the proposed amendment to Section 402.4.2 of the IBC/2000, entitled “Number of means of egress,” would delete the qualifying language “for persons other than employees.” The IBC/2000 establishes a minimum of two required means of egress for tenant spaces within a covered mall where there is a travel distance “for persons other than employees” that exceeds 75 feet or where the occupant load exceeds 50. The 1996 BOCA National Building Code made no distinction as to whether the people exiting were employees or customers. The Department believes that the minimum provision of two means of egress for a tenant space within a covered mall



should continue to be based on the travel distance and/or the occupant load. It should not be based on whether the people using the means of egress are employees or customers. Therefore, the Department proposes to retain the current requirements of the building subcode by deleting the qualifying language in the IBC/2000.

**11. At N.J.A.C. 5:23-3.14(b)6i,** the proposed amendment to Table 503 of the IBC/2000, entitled “Allowable Heights and Building Areas,” would delete the height and area limitations for Use Group A-5 construction of Types IIIB, IV, and VB. Use Group A-5 is a new use group determination in the IBC/2000 that allows the construction of unlimited area stadiums of combustible construction. Currently, the building subcode has no such use group designation. Therefore, the Department is proposing that Use Group A-5 construction of Types IIIB, IV, and VB be deleted from Table 503, which would prohibit the construction of unlimited area, combustible stadiums, thereby ensuring that there is no reduction in life safety for building occupants. In addition, the Department is proposing that Use Group U (utility and miscellaneous) be deleted from Table 503. The application of Use Group U only to structures that are accessory to residential occupancies does not constitute a clear and distinct use group. Therefore, the Department is proposing that the requirements of the building subcode be retained. (See Issue 9 for a companion discussion.)

**12. At N.J.A.C. 5:23-3.14(b)6ii,** the proposed amendment would delete Section 507.1 of the IBC/2000, entitled “Unsprinklered, one story.” This section of the IBC/2000 allows unlimited area, one story buildings of Use Groups F-2 or S-2 to be constructed without suppression when surrounded by public ways or yards of not less than 60 feet, even if constructed of combustible materials. Currently, the building subcode does not allow

unlimited, one story buildings of combustible construction to be unsprinklered. Buildings constructed with combustible materials that are not suppressed present a significant fire and life safety hazard, especially if the size of the building is not limited. Therefore, in order to prevent a reduction in public safety, the Department is proposing that this section of the IBC/2000 be deleted in its entirety.

**13. At N.J.A.C. 5:23-3.14(b)6iii,** the proposed amendment to Section 507.3 of the IBC/2000, entitled “Two story,” would require that unlimited height and area, two story buildings be constructed of noncombustible materials. Currently, the building subcode does not allow the construction of unlimited area, two story buildings. The IBC/2000 allows the construction of unlimited area, two story buildings of any construction type. This proposed amendment takes a middle ground. The Department is proposing that Section 507.3 of the IBC/2000 be amended to allow the construction of unlimited area, two story buildings that are constructed of noncombustible materials. Unlimited area, two story buildings of combustible construction compromise the life safety of building occupants and fire department personnel. Therefore, it seems reasonable to allow unlimited area, two story buildings of noncombustible materials, thereby providing protection to building occupants and fire department personnel.

**14. At N.J.A.C. 5:23-3.14(b)7i,** the proposed amendment to Table 602 of the IBC/2000, entitled “Fire Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance<sup>a</sup>,” would delete Use Group U from the exterior wall fire resistance rating requirements. In addition, the proposed amendment would delete the reference to Use Group U at Note b, thereby retaining the current provisions of the building subcode. (See Issue 9 for a companion discussion.)

**15.** At **N.J.A.C. 5:23-3.14(b)7ii**, the proposed amendment to Section 602.3 of the IBC/2000 entitled, “Type III,” would delete the provision that fire-retardant-treated wood framing be allowed within exterior wall assemblies with a 2-hour rating because combustible framing in exterior wall assemblies is not currently allowed by the building subcode. Therefore, this proposed amendment ensures that there is no step backward in technical requirements.

**16.** At **N.J.A.C. 5:23-3.14(b)8i**, the proposed amendment to Table 705.4 of the IBC/2000, entitled “Fire Wall Fire Resistance Ratings,” would delete Use Group U from the fire wall fire resistance rating requirements, thereby retaining the current requirements of the building subcode. (See Issue 9 for a companion discussion.)

**17.** At **N.J.A.C. 5:23-3.14(b)8ii**, the proposed amendment would delete the text of Section 705.5 of the IBC/2000, entitled “Horizontal continuity,” and would insert the text of Section 707.6 of the 1996 BOCA National Building Code, which requires that firewalls be made smoke-tight at the junction of exterior walls. In addition, Section 707.6 of the 1996 BOCA National Building Code requires that in exterior construction walls extend through the stud space to the exterior sheathing. The IBC/2000 requires that exterior walls be fire resistance rated for a distance of four feet on either side of the fire wall. The Department believes that this additional eight feet of fire resistance rated wall is excessive because exterior walls that extend to the sheathing provide adequate protection. Adopting the IBC/2000 requirement would add to the cost of construction without a commensurate improvement in life safety. Therefore, the Department is proposing that the requirements from the current building subcode be retained.

**18.** At **N.J.A.C. 5:23-3.14(b)8iii**, the proposed amendment to Section 707.14.1 of the IBC/2000, entitled “Elevator lobby,” would delete the requirement that elevator lobbies be provided in low rise buildings. Requiring elevator lobbies in high rise buildings with fire resistance rated corridors is logical to reduce smoke migration. However, elevator lobbies are not necessary in low rise structures where there is a limited travel distance and little hazard associated with smoke migration. Therefore, the Department is proposing that the current building subcode provision be retained by requiring elevator lobbies in high rise structures only.

**19.** At **N.J.A.C. 5:23-3.14(b)9i**, the proposed amendment would delete the exception contained in Section 903.2.5 of the IBC/2000, entitled “Group I,” because 13D sprinkler systems are not adequate for institutional use groups, especially Use Group I-1 buildings, which have residents whose exiting capabilities are “slow” as categorized by the Life Safety Code (NFPA 101). An exiting capability categorized as “slow” means that it could take occupants as long as 13 minutes to exit the building. 13R (residential) sprinkler systems provide enough water for up to four sprinkler heads with a 30-minute discharge. 13D sprinkler systems, which are scoped for Use Group R-3 (single-family detached), are designed for a maximum of two sprinkler heads with a maximum 10-minute discharge. This is less than the time allowed for residents of institutional use groups to exit the building. Therefore, the Department is proposing that a 13R sprinkler system, which is more suitable to the exiting capabilities of the residents occupying these types of buildings, be required in buildings of Use Group I-1.

**20.** At **N.J.A.C. 5:23-3.14(b)9ii**, the proposed amendment would delete Section 903.2.8 of the IBC/2000, entitled “Group R-2,” which establishes a threshold of 16 dwelling units

for requiring automatic fire sprinklers in Use Group R-2. The 1996 BOCA National Building Code has a threshold of 12 dwelling units for automatic fire sprinklers in Use Group R-2 buildings and requires interior means of egress. Because proposing the adoption of the IBC/2000 threshold for automatic fire sprinklers would reduce the level of safety of building occupants, the Department is proposing that the current building subcode threshold for automatic fire sprinklers be retained.

**21. At N.J.A.C. 5:23-3.14(b)9iii,** the proposed amendments to Section 903.2.9 of the IBC/2000, entitled “Group R-4,” would delete the cross-reference to Section 903.3.1.3. Section 903.2.9 of the IBC/2000 allows the use of either 13R or 13D sprinkler systems. Use Group R-4 is group homes with 6-16 residents. The Department believes that the 13D system, which is scoped for single-family detached residences, is not sufficient for a group home with so many residents. Therefore, the Department is proposing that the 13R, not 13D, sprinkler system be required. (Issue 19 contains an explanation of the differences between a 13R and 13D sprinkler system.)

**22. At N.J.A.C. 5:23-3.14(b)9iv,** the proposed amendments would delete the text of Section 903.2.12.1 of the IBC/2000, entitled “Stories and basements without openings,” and would insert the text of Section 904.10 of the 1996 BOCA National Building Code. The requirements for sprinklers in windowless stories in the IBC/2000 differ from those of the 1996 BOCA National Building Code in that the IBC/2000 exempts windowless stories that are 1,500 square feet or less. Providing an exemption for such a space has no technical justification and provides no discernable benefit to building occupants. Therefore, the Department is proposing that this section of the IBC/2000 be deleted in its entirety and that the requirements of the building subcode be retained.

**23. At N.J.A.C. 5:23-3.14(b)9v,** the proposed amendment would insert a new Section 903.2.16, entitled “Automatic sprinkler system thresholds,” and a new table to provide a sprinkler threshold for Use Groups B, F-2, and S-2 of construction Types IIB, IIIB, and VB. The installation of sprinkler systems shall conform to Section 903.3.1.1 of the IBC/2000, entitled “NFPA 13 Sprinkler Systems.” Although the 1996 BOCA National Building Code does not provide a sprinkler system threshold, it establishes a maximum area for an unsprinklered building, which is tied to construction type. Buildings in excess of the maximum for a specified construction type are required to have sprinklers. Upon review of the IBC/2000, the Department discovered that that the IBC/2000 allows buildings that exceed the maximum area and construction type in the current building subcode to be built without sprinklers. Therefore, the proposed amendment retains the current level of life safety by establishing a sprinkler system threshold when buildings of Use Groups B, F-2, and S-2 are built of Types IIB, IIIB, or VB construction.

**24. At N.J.A.C. 5:23-3.14(b)9vi,** the proposed amendment would delete Section 903.3.2 of the IBC/2000, entitled “Quick response and residential sprinklers.” This section is included in the IBC/2000 because the 1996 edition of NFPA 13, which is referenced in the IBC/2000, does not contain requirements for quick response and residential sprinklers. However, because the Department is proposing to adopt the 1999 edition of NFPA 13, which does contain requirements for these types of sprinkler systems, the Department is proposing that this section of the IBC/2000 be deleted in its entirety.

**25. N.J.A.C. 5:23-3.14(b)9vii,** the proposed amendment would delete the text of Section 905.2 of the IBC/2000, entitled “Installation standards,” and would insert the text of Sections 915.4, 915.5, and 915.6 of the 1996 BOCA National Building Code. The 1996

BOCA National Building Code specifies flow and pressure requirements for standpipes, while the IBC/2000 references NFPA 14. Currently, under the 1996 BOCA National Building Code, standpipes are required for a four-story building where the fourth floor level exceeds 30 feet in height. If a four-story building requires one standpipe and the building is fully suppressed, the standpipe and the supply pipe are required by the 1996 BOCA National Building Code to be sized for specific flows. The 1996 BOCA National Building Code does not require a pressure demand at the top of the riser.

Under the IBC/2000, the same four-story building would require 500 gallons per minute (gpm) at 100 pounds per square inch (psi) at the topmost outlet of the standpipe. Allowing for elevation losses and friction loss, the demand would be required to be 500 gpm at 132 psi at the water source. In New Jersey, achieving that kind of pressure requires a fire pump. This is excessive and is not necessary for fire safety. Therefore, the proposed amendments would retain the current building subcode provisions.

In addition to the cross-reference to NFPA 14 for requirements for standpipes, the IBC/2000 references NFPA 14 for fire department connections, which provides that fire department connections are allowed to serve fire protection systems for portions of buildings (rather than for the entire building) provided there is a sign designating the area. This means that, according to NFPA 14, there could be several fire department connections per floor with signs identifying which connections serve which area or floor. The 1996 BOCA National Building Code requires that fire department connections serve all sprinklers and all standpipes within the building. Fire department personnel are familiar with this configuration, which has been effective. Therefore, the Department is

proposing that the text of the BOCA section on fire department connections (Section 916.0) be retained in the building subcode. (See Issue 27 for a companion discussion.)

**26. At N.J.A.C. 5:23-3.14(b)9viii and (b)9ix,** the proposed amendments to Section 905.4 of the IBC/2000, entitled “Location of class I standpipe hose connections,” would delete Items 1 and 2 and would insert the text of Section 915.7 of the 1996 BOCA National Building Code. Typical stair configuration makes complying with the requirements in the IBC/2000 difficult. The run of the vertical standpipe would require significant piping changes to install standpipe hose connections at intermediate levels between floors. The 1996 BOCA National Building Code, at Section 915.7, requires standpipe hose connections at each floor level, at every exit stairway, and on each side of the wall adjacent to the exit opening of a horizontal exit, which provides adequate standpipe hose connections and minimizes piping changes. Therefore, the Department is proposing that the provisions in the current building subcode be retained.

In addition, Section 905.4 of the IBC/2000 requires a standpipe every 200 feet (measured from the nearest point of fire department vehicle access). The current requirement in the 1996 BOCA National Building Code is for a standpipe every 400 feet from the nearest point of fire department vehicle access. The Department is proposing that the requirements of the building subcode be retained with a modification to include the 200-foot requirement of the IBC/2000 for standpipes. This change in the IBC/2000 to a 200-foot requirement for standpipes elicited a great deal of discussion by the ICC Advisory Committee and the Code Advisory Board. The Department is asking for public comments on this issue.



Finally, the proposed amendment would delete Section 905.4.2 of the IBC/2000, entitled “Interconnection,” and would insert the text of Section 915.7.1 of the 1996 BOCA National Building Code. The IBC/2000 requires that, in buildings where more than one standpipe is required, standpipes be interconnected in accordance with NFPA 14. The 1996 BOCA National Building Code requires 2 ½ inch hose connections with valves and threads compatible with the connections used by the local fire department for each standpipe, at each floor level, and not more than five feet above the floor. The Department is proposing that the provisions of the building subcode be retained.

**27. At N.J.A.C. 5:23-3.14(b)9x,** the proposed amendments would delete Section 906 of the IBC/2000, entitled “Portable Fire Extinguishers,” in its entirety because fire extinguishers are under the jurisdiction of the Uniform Fire Code.

The Department is proposing to insert a new Section 906, entitled “Fire Department Connections,” to include the text of the requirements for fire department connections from Section 916.0 of the 1996 BOCA National Building Code. The IBC/2000, which references NFPA 14, provides that fire department connections are allowed to serve sprinklers for portions of buildings instead of entire buildings. (See Issue 25 for a companion discussion.)

**28. At N.J.A.C. 5:23-3.14(b)9xi,** the proposed amendments would delete Section 907.2.10.1.4 of the IBC/2000, entitled “Additions, alterations, or repairs to Group R,” because these areas are covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.

**29. At N.J.A.C. 5:23-3.14(b)9xii,** the proposed amendment to Section 907.2.10.3 of the IBC/2000, entitled “Interconnection,” would delete Exception 2 in its entirety. Exception

2 addresses smoke alarms in existing buildings. The Department is proposing to delete Exception 2 because the New Jersey Rehabilitation Subcode covers these requirements.

**30. At N.J.A.C. 5:23-3.14(b)9xiii**, the proposed amendments to Section 909.18.8.3 of the IBC/2000, entitled “Reports,” would delete the requirement that design professionals sign and seal a testing report. The Building Design Services Act (N.J.S.A. 45:4B-1) establishes when construction documents need to be signed and sealed. Therefore, the Department is proposing that this requirement be deleted from Section 909.18.8.3 of the IBC/2000.

**31. At N.J.A.C. 5:23-3.14(b)10i**, the proposed amendment to Section 1003.3.1.3.5 of the IBC/2000, entitled “Security Grilles,” would delete the reference to Use Groups B (business), F (factory), M (mercantile), and S (storage) as there is no technical justification for restricting security grilles to these use groups. The 1996 BOCA National Building Code, at Section 1017.5, requires that horizontal sliding or vertical security grilles that are part of a required means of egress be openable from the inside without the use of a key or special knowledge or effort when a space is occupied, but does not restrict security grilles to certain occupancies. Therefore, the Department is proposing that the current building subcode provisions be retained.

**32. At N.J.A.C. 5:23-3.14(b)10ii**, the proposed amendment to Section 1003.3.1.8 of the IBC/2000, entitled “Locks and latches,” would delete the provision that Use Group A (assembly) occupancies with occupant loads of 300 or fewer people be allowed to have key-operated locks. In addition, a new Exception 5 would be added to allow key-operated locks for dwelling units provided the keys cannot be removed when the door is locked from the side from which egress is made. Currently, the 1996 BOCA National

Building Code does not allow key-operated locks in Use Group A occupancies with occupant loads of 300 or fewer. Allowing key-operated locks in these types of occupancies would reduce the level of safety currently provided to building occupants. In addition, the 1996 BOCA National Building Code allows key-operated locks in dwelling units where the key cannot be removed when the door closes from the exiting side. Therefore, the proposed amendment would retain the current requirements of the building subcode.

**33. At N.J.A.C. 5:23-3.14(b)10iii,** the proposed amendment to Section 1003.3.1.8.2 of the IBC/2000, entitled “Delayed egress locks,” would delete Group E (education) from the list of occupancies that would be allowed to have delayed egress locks. The 1996 BOCA National Building Code does not allow delayed egress locks in Use Group E. The Department believes that these types of locking mechanisms are not appropriate in educational occupancies because in an emergency students should be able to exit the buildings as quickly as possible. Therefore, the Department is proposing that this section of the IBC/2000 be deleted and the current provisions of the building subcode be retained.

**34. At N.J.A.C. 5:23-3.14(b)10iv,** the proposed amendment to Section 1004.2.2.1 of the IBC/2000, entitled “Two exit access doorways,” would delete the last sentence of Exception 1. The provisions for the remoteness of exits in the IBC/2000 and the 1996 BOCA National Building Code are similar. However, the IBC/2000 states that exit enclosure walls cannot be less than 30 feet apart at any point in a direct line of measurement. There is no such provision in the 1996 BOCA National Building Code. With larger buildings, a greater travel distance between means of egress is necessary.

However, the 30-foot minimum requirement for the distance between exit enclosures causes a problem for smaller buildings because the travel distance between means of egress is shorter. Therefore, the Department is proposing to delete the 30-foot distance provision.

**35. At N.J.A.C. 5:23-3.14(b)10v,** the proposed amendment would delete the text of Section 1004.2.3 of the IBC/2000, entitled “Egress through intervening spaces,” and would insert the text of Section 1006.2.1 of the 1996 BOCA National Building Code. Section 1004.2.3 of the IBC/2000 prohibits egress through adjoining kitchens, store rooms, closets, or similar spaces. The 1996 BOCA National Building Code allows one exit access through such spaces. By prohibiting exiting through kitchens, the IBC/2000 provision would disproportionately impact small restaurants with a single main entrance and a secondary exit in the back. It would also impact large mixed-use buildings such as casinos that have a small restaurant with an exit through the main entrance and across the casino floor and a secondary exit in the rear through the kitchen. Therefore, the Department is proposing that the provisions of the current building subcode be retained.

**36. At N.J.A.C. 5:23-3.14(b)10vi, 10vii, 10viii, and 10ix,** the proposed amendments would insert “passageway” into the text of Sections 1004.3.2, entitled “Corridors,” Section 1004.3.2.2, entitled “Corridor width,” and Section 1004.3.2.3, entitled “Dead ends,” of the IBC/2000. These sections of the IBC/2000 do not include passageways. The distinctions in Section 1011 of the 1996 BOCA National Building Code between corridors, aisles, and passageways have been clear and easily applied. Therefore, the Department is proposing that these sections be amended to include the text of Section 1011 of the 1996 BOCA National Building Code for familiarity and consistency of

interpretation. In addition, the proposed amendments to Section 1004.3.2.1 of the IBC/2000, entitled “Corridor Fire Resistance Rating,” would delete Use Group U from the fire resistance rating requirements for corridors, thereby retaining the requirements of the building subcode. (See Issue 9 for a companion discussion.)

**37. At N.J.A.C. 5:23-3.14(b)10x,** the proposed amendment to Table 1005.2.2 of the IBC/2000, entitled “Buildings with One Exit,” would delete Use Group U from the provisions of the table that require one exit in a building. The Department is proposing that the current requirements of the building subcode be retained. (See Issue 9 for a companion discussion.)

**38. At N.J.A.C. 5:23-3.14(b)10xi,** the proposed amendment to Section 1005.3.2 of the IBC/2000, entitled “Vertical exit enclosures,” would modify Exception 1 to include the language, “a stairway connecting not more than two floor levels, one of which is the level of exit discharge, which serves an occupant load of not more than 10 or serves 4 or fewer dwelling units.” This IBC/2000 section relies only on occupant load. Occupant load works well for commercial buildings, but does not work so well for apartment buildings. The proposed language is currently a provision in the Uniform Fire Code and the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.

In addition, in the same section of the IBC/2000, Exception 8, which provides that in all use groups other than H (hazardous) and I (institutional), 50% of the egress stairways serving one adjacent floor may be unenclosed, would be deleted. An unenclosed stairway may present a hazard to building occupants while attempting to exit a building in an emergency. Therefore, in order to reduce that hazard, Exception 8 is proposed for deletion.

**39.** At **N.J.A.C. 5:23-3.14(b)10xii**, the proposed amendment would delete the text of Section 1005.3.5 of the IBC/2000, entitled “Horizontal exits,” and would insert the text of Section 1019.0 of the 1996 BOCA National Building Code. The text of Section 1019.0 of the 1996 BOCA National Building Code ensures that the use of horizontal exits works with travel distance requirements. For example, it is customary in large warehouse buildings to use horizontal exits to comply with travel distance requirements. The text of Section 1005.3.5 of the IBC/2000 requires that each portion of a building be served by an exit other than a horizontal exit, thereby limiting the space size (which is otherwise unlimited) of a warehouse by basing exits solely on travel distance. The Department believes that requiring each portion of a building to be served by an exit other than a horizontal exit is unnecessarily restrictive. Therefore, the Department is proposing that the current requirements contained in the building subcode be retained.

**40.** At **N.J.A.C. 5:23-3.14(b)10xiii**, the proposed amendment to Section 1009.1 of the IBC/2000, entitled “General,” would delete basements. This section of the IBC/2000 provides that basements and sleeping rooms below the fourth story be provided with egress windows. This restriction does not exist in the 1996 BOCA National Building Code. The Department believes that it is reasonable to require egress windows for sleeping rooms, but such a requirement is not reasonable for basements without sleeping rooms. Therefore, the requirement of an egress window in a basement is proposed to be deleted, thereby retaining the current provisions of the building subcode.

**41.** At **N.J.A.C. 5:23-3.14(b)11**, the proposed amendment would delete Chapter 11 of the IBC/2000, entitled “Accessibility,” in its entirety. The Barrier Free Subcode (N.J.A.C.

5:23-7) is the adopted subcode of the Uniform Construction Code that provides the requirements for accessible construction.

**42.** At **N.J.A.C. 5:23-3.14(b)12**, the proposed amendment would delete Chapter 13 of the IBC/2000, entitled “Energy Efficiency,” in its entirety. Energy requirements are covered by the adopted energy subcode of the Uniform Construction Code at N.J.A.C. 5:23-3.18.

**43.** At **N.J.A.C. 5:23-3.14(b)13i**, the proposed amendment to Table 1505.1 of the IBC/2000, entitled “Minimum Roof Covering Classification for Types of Construction,” would delete the provision, which is located at Note b, that allows roof coverings that are not classified on Use Group U structures. The Department is proposing that the current requirements of the building subcode be retained. (See Issue 9 for a companion discussion.)

**44.** At **N.J.A.C. 5:23-3.14(b)14i**, the proposed amendment would delete Section 1603.3 of the IBC/2000, entitled “Live loads posted,” in its entirety. This requirement is an administrative requirement and is currently covered by the Uniform Construction Code at N.J.A.C. 5:23-3.5(a).

**45.** At **N.J.A.C. 5:23-3.14(b)14ii**, the proposed amendment would delete Section 1603.4 of the IBC/2000, entitled “Occupancy permits for changed loads.” This requirement applies to work done in existing buildings, which is covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.

**46.** At **N.J.A.C. 5:23-3.14(b)14iii**, the proposed amendment would delete “building officials” from Table 1607.1 of the IBC/2000, entitled “Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads,” at Note G, and would insert

“design professionals.” The Department believes that a design professional should determine design increases from snow loads.

**47. At N.J.A.C. 5:23-3.14(b)14iv**, the proposed amendments would modify Section 1607.9 of the IBC/2000, entitled “Reduction in live loads,” to clarify that design professionals must choose one of the load reduction methods. As written, this section of the IBC/2000 does not prohibit design professionals from using both of the load reduction methods provided. The building subcode, on the other hand, requires that a design professional choose one method. The proposed amendment would specify that design professionals are to choose one method and apply it throughout the building.

**48. At N.J.A.C. 5:23-3.14(b)14v and 14vi**, the proposed amendments to Section 1607.9.1.3 of the IBC/2000, entitled “Special occupancies,” and Section 1607.9.2 of the IBC/2000, entitled “Alternate floor live load reduction,” would provide that reductions of live loads not be allowed in educational occupancies. In Section 1606.7.2.2 of the 1996 BOCA National Building Code, live loads are not allowed to be reduced in Use Group A (assembly) or Use Group E (educational) occupancies. The IBC/2000 does not allow live load reductions in Use Group A occupancies. The proposed amendment would retain the prohibition of live load reductions in educational occupancies currently contained in Sections 1607.9.1.3 and 1607.9.2 of the 1996 BOCA National Building Code.

**49. At N.J.A.C. 5:23-3.14(b)14vii**, the proposed amendment would delete Section 1614.1.1 of the IBC/2000, entitled “Addition to existing buildings.” This section of the IBC/2000 provides the structural requirements for additions, which are covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.32(h)1-3.



**50.** At **N.J.A.C. 5:23-3.14(b)14viii**, the proposed amendment would delete Section 1614.2 of the IBC/2000, entitled “Change of Occupancy.” This section of the IBC/2000 provides the structural requirements for a building undergoing a change of occupancy. This is covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.31. Therefore, the Department is proposing that this section of the IBC/2000 be deleted.

**51.** At **N.J.A.C. 5:23-3.14(b)14ix**, the proposed amendment would delete Section 1614.3 of the IBC/2000, entitled “Alterations.” This section of the IBC/2000 contains the structural requirements for alterations, which are covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.6.

**52.** At **N.J.A.C. 5:23-3.14(b)14x**, the proposed amendment would delete Item 1 in Section 1621.1.7 of the IBC/2000, entitled “Component anchorage #1,” because it is redundant. The manufacturers of the components already incorporate a safety factor. An additional factor is not needed.

**53.** At **N.J.A.C. 5:23-3.14(b)14xi**, the proposed amendment to Section 1621.3.14 of the IBC/2000, entitled “Elevator design requirements,” would specify that the scope of ASME A17.1, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater,” at Part XXIV, which is referenced in Section 1621.3.14 of the IBC/2000, shall be deleted. Section 1621.3.14 of the IBC/2000 contains design requirements for elevators in seismic risk zone 2 or greater. Part XXIV of ASME A17.1 also contains design requirements for elevators in seismic risk zone 2 or greater. By deleting the scope of ASME A17.1, conflict between the code and the standard would be eliminated.

**54.** At **N.J.A.C. 5:23-3.14(b)14xii**, the proposed amendment to Table 1622.2.5(2) of the IBC/2000, entitled “Importance Factor (*I*) and Seismic Use Group Classification for

Nonbuilding Structures,” would delete the term “authority having jurisdiction” and would insert the term “construction official,” which is defined by the Uniform Construction Code at N.J.A.C. 5:23-1.4. The proposed amendment would replace “authority having jurisdiction” with “construction official” in Section 3202.3.4, entitled “Pedestrian walkways” (proposed at N.J.A.C. 5:23-3.14(b)21ii) and Section 3308.1, entitled “Storage and handling of materials” (proposed at N.J.A.C. 5:23-3.14(b)22ii). In addition, at Section 3203.1.2 of the IBC/2000, entitled “Vaults and other enclosed spaces,” the proposed amendment would delete the language “authority having jurisdiction or legislative body having jurisdiction,” and would insert “Uniform Construction Code (N.J.A.C. 5:23)” to make clear that the construction of vaults and other enclosed spaces are required to comply with the provisions of the Uniform Construction Code (proposed at N.J.A.C. 5:23-3.14(b)21i). Finally, at Section 3202.4 of the IBC/2000, entitled “Temporary encroachments,” the proposed amendment would delete “local authority having jurisdiction” and would insert “municipality” because according to the Uniform Construction Code, jurisdiction for temporary vestibules, shelters, and awnings lies with the local enforcing agency (proposed at N.J.A.C. 5:23-3.14(b)21iii).

**55. At N.J.A.C. 5:23-3.14(b)15i,** the proposed amendment to Section 1701.1 of the IBC/2000, entitled “Scope,” would limit special inspections to Class I buildings, which are usually large buildings that are of complicated construction, which warrant the need for special inspections. Requirements for Class I buildings can be found in the Uniform Construction Code at N.J.A.C. 5:23-4.3A, entitled “Enforcing agency classification.” The IBC/2000 applies special inspections to a broad range of buildings and in doing so reduces the responsibilities of code officials. New Jersey’s code officials are well-

equipped to perform these kinds of inspections. Special inspectors can provide a valuable service on large, complex building projects. Therefore, the special inspector provision of the IBC/2000 is amended to apply only to Class I buildings.

**56.** At **N.J.A.C. 5:23-3.14(b)15ii**, the proposed amendment to Section 1702.1 of the IBC/2000, entitled “General,” would modify the definition of “approved agency” to include special inspectors. The definition would clarify that an individual may act as an approved agency as long as the individual has the required knowledge and equipment to perform the job and is independent of the contractor performing the work.

**57.** At **N.J.A.C. 5:23-3.14(b)15iii**, the proposed amendment to Section 1703.1 of the IBC/2000, entitled “Approved agency,” would clarify that information necessary for the determination that an agency meets all the applicable requirements to be considered an “approved agency” shall be provided to the construction official upon request.

**58.** At **N.J.A.C. 5:23-3.14(b)15iv**, the proposed amendment to Section 1703.7 of the IBC/2000, entitled “Evaluation and follow-up inspection services,” would include a cross-reference to N.J.A.C. 5:23-4.26, entitled “Certification of building elements.” This section of the Uniform Construction Code requires that building elements be certified to ensure that their design meets code. The proposed amendment would retain that standard.

**59.** At **N.J.A.C. 5:23-3.14(b)15v**, the proposed amendment to Section 1704.1 of the IBC/2000, entitled “General,” would specify that special inspections apply to Class I buildings only (See Issue 55) and that “design professional in responsible charge” be changed to “person in responsible charge.” The design professional may be, but is not always, charged with oversight of construction. Therefore, the Department is proposing

that the provision be broadened to include anyone that is responsible for the oversight of construction.

**60.** At **N.J.A.C. 5:23-3.14(b)15vi**, the proposed amendment to Section 1704.1.2 of the IBC/2000, entitled “Report requirement,” would require that inspection reports be provided to the construction official and to the person in charge of work in accordance with the Uniform Construction Code Act at N.J.A.C. 5:23-2.21(c).

**61.** At **N.J.A.C. 5:23-3.14(b)15vii**, the proposed amendment to Section 1704.3 of the IBC/2000, entitled “Steel construction,” would specify that special inspections for steel shall be for the on-site erection of steel construction. Steel is factory-made and is required to be produced according to specified quality assurance standards. Special inspections are intended to ensure that steel members are erected properly. Therefore, the proposed amendment would require special inspections only for the on-site erection of steel.

**62.** At **N.J.A.C. 5:23-3.14(b)15viii**, the proposed amendment would delete Items 1, 3, and 4 in Table 1704.3 of the IBC/2000, entitled “Required Verification and Inspection of Steel Construction.” Manufacturers of steel are required to meet specified design standards for the production of steel. Special inspections, which are for construction purposes, are not appropriate for steel manufacturing. Therefore, the proposed amendment would delete those sections of Table 1704.3 that deal with the manufacturing of steel.

**63.** At **N.J.A.C. 5:23-3.14(b)15ix**, the proposed amendment to Section 1704.5 of the IBC/2000, entitled “Masonry construction,” would limit the inspection of masonry construction to those buildings that fall in Seismic Design Category D, which is the

highest seismic design category. In addition, the reference to Table 1805.5(1) would be deleted in Exception 2. Exception 2 exempts from special inspections masonry foundation walls that are constructed in accordance with the masonry foundation tables in Chapter 18 of the IBC/2000, entitled “Soil and Foundations.” This exception is too broad. Therefore, the proposed amendment narrows the exception to apply only to masonry foundation walls that are reinforced according to the masonry foundations tables that are found in Chapter 18 of the IBC/2000.

**64. At N.J.A.C. 5:23-3.14(b)15x and 15xi,** the proposed amendment would delete Section 1704.6 of the IBC/2000, entitled “Wood construction,” and Section 1704.9, entitled “Pier foundations.” Because New Jersey has highly qualified code officials, there is little need for special inspections. New Jersey’s code officials are charged with the responsibility to ensure that construction conforms to the code. It is not necessary to expand the scope of projects for which special inspections are required. Therefore, these requirements for special inspections are proposed for deletion.

**65. At N.J.A.C. 5:23-3.14(b)15xii,** the proposed amendment to Section 1705.1 of the IBC/2000, entitled “Scope,” would provide that quality assurance plans be required for buildings that fall in Seismic Design Category D. In New Jersey, buildings that because of use and siting are determined to be in Seismic Design Category D are the only buildings affected by the seismic design categories in the IBC/2000. These buildings are primarily in northern New Jersey. New Jersey has no sites that fall into Categories E or F. Therefore, the proposed amendment would specify that quality assurance plans are required only for buildings that are determined to be Seismic Design Category D.

**66.** At **N.J.A.C. 5:23-3.14(b)15xiii**, the proposed amendments would delete Section 1706 of the IBC/2000, entitled “Quality Assurance for Wind Regulations.” New Jersey’s code officials are well equipped to perform inspection for wind load designs. The Department believes that special inspections for wind load designs are not necessary.

**67.** At **N.J.A.C. 5:23-3.14(b)15xiv**, the proposed amendment would delete Section 1708.1, entitled “Masonry,” Section 1708.1.1, entitled “Empirically designed masonry and glass unit masonry in nonessential facilities,” Section 1708.1.2, entitled “Empirically designed masonry and glass unit masonry in essential facilities,” Section 1708.1.3, entitled “Engineered masonry in nonessential facilities,” Section 1708.1.4, entitled “Engineered masonry in essential facilities,” Section 1708.3, entitled “Reinforcing and pre-stressing steel,” Section 1708.4, entitled “Structural tests,” and Section 1708.5, entitled “Mechanical and electrical equipment.” These sections of the IBC/2000 originated in the Standard Building Code (Southern) and provide for special inspections that are not necessary in New Jersey. The Department believes that because New Jersey’s inspectors are trained professionals, these sections of the IBC/2000 should be deleted in their entirety.

**68.** At **N.J.A.C. 5:23-3.14(b)15xv**, the proposed amendment would delete Section 1709 of the IBC/2000, entitled “Structural Observations.” This section of the IBC/2000 requires structural observations for buildings whose use and siting put them in Seismic Design Categories D, E, or F. Because New Jersey does not have any buildings that fall in Seismic Design Categories E or F, these references to those seismic design categories are proposed for deletion. The requirements would be retained for buildings in Seismic Design Category D.

**69.** At **N.J.A.C. 5:23-3.14(b)16i**, the proposed amendment to Section 1802.2.6 of the IBC/2000, entitled “Seismic Design Category C,” would delete the references to Seismic Design Category C in and would insert “Seismic Design Category D.” This section of the IBC/2000 requires that structures in Seismic Design Category C (essential facilities throughout the entire State) have a soil investigation and evaluation for slope instability, liquefaction, and surface rupture due to faulting or lateral spreading. The Department believes that these types of soil investigations should be required for Seismic Design Category D buildings, and not C, because the potential ground acceleration for Seismic Design Category C is significantly lower than that of Seismic Design Category D. Therefore, the proposed amendment would apply these extensive soil investigations to Seismic Design Category D buildings.

**70.** At **N.J.A.C. 5:23-3.14(b)16ii**, the proposed amendment would insert a new Section 1802.2.8 in the IBC/2000 to include the text of Section 1802.1 of the 1996 BOCA National Building Code, which requires soil tests for buildings that are more than three stories or 40 feet in height. This amendment, which is currently part of the building subcode, is necessary to confirm that the soil has the appropriate load bearing capacity.

**71.** At **N.J.A.C. 5:23-3.14(b)16iii**, the proposed amendment to Section 1802.4.1 of the IBC/2000, entitled “Exploratory boring,” would require that there be at least one exploratory boring to rock or an adequate depth below the load bearing strata for every 2,500 square feet of built over area. Currently, the 1996 BOCA National Building Code, in Section 1802.1, establishes a minimum number of exploratory borings; the IBC/2000 assigns the decision regarding exploratory borings to the design professional. The Department believes that the specific area requirement for exploratory borings in Section

1802.1 of the 1996 BOCA National Building Code provides designers and builders a level of predictability for what is required. Therefore, the Department is proposing that the text of Section 1802.1 of the 1996 BOCA National Building Code be retained.

**72.** At **N.J.A.C. 5:23-3.14(b)16iv**, the proposed amendments to Section 1802.6 of the IBC/2000, entitled “Reports,” would require that a written report of investigation be provided to the building official, upon request, when soil borings are required. A literal reading of the IBC/2000 requires that when soil borings are not required, a report is required. This is illogical. This rule proposes that written report(s) of the investigation(s) be submitted when soil borings are required.

**73.** At **N.J.A.C. 5:23-3.14(b)16v**, the proposed amendment would delete the 400 square foot building area threshold in Section 1805.2.1 of the IBC/2000, entitled “Frost protection,” and would insert the 100 square foot threshold from the 1996 BOCA National Building Code, Section 1806.1. The Department believes that there is no reason that this provision should be expanded to allow foundations that support buildings between 100 and 400 square feet to be constructed above the frostline. Therefore, the Department is proposing that the 100 square foot threshold in Section 1806.1 of the 1996 BOCA National Building Code be retained.

**74.** At **N.J.A.C. 5:23-3.14(b)16vi**, the proposed amendment to Section 1806.3.1 of the IBC/2000, entitled “Floors,” would require that floors be waterproofed by using either a membrane of rubberized asphalt, butyl rubber, or not less than 6 mil polyvinyl chloride. The IBC/2000 specifies 60 mil whereas Section 1813.3.1.1 of the 1996 BOCA National Building Code specifies 6 mil. The Department believes that the measurement in the



IBC/2000 is excessive. Therefore, the Department is proposing that the measurement in Section 1813.3.1.1 of the 1996 BOCA National Building Code be retained.

**75. At N.J.A.C. 5:23-3.14(b)16vii,** the proposed amendment would create a new Section 1806.5 in the IBC/2000, entitled “Erosion protection,” to incorporate language from Section 1813.8 of the 1996 BOCA National Building Code. Currently, the IBC/2000 has no requirements for erosion protection. Therefore, the Department is proposing to amend this section because downspouts, scuppers, or other rain collection devices are necessary to prevent soil erosion.

**76. At N.J.A.C. 5:23-3.14(b)16viii,** the proposed amendment would delete Section 1807.2.6 of the IBC/2000, entitled “Spacing,” and would insert the text of Section 1816.9 of the 1996 BOCA National Building Code. The IBC/2000 requires that “center-to-center spacing of piers or piles shall be as recommended in the soils reports.” The 1996 BOCA National Building Code provides specifications to ensure that piles are not erected too close together. Center-to-center spacing is not always the recommended method. If piles or piers are erected too close together, shear cones will overlap, which reduces the load bearing capacity of the piles or piers. The current provisions of the building subcode are proposed to be retained.

**77. At N.J.A.C. 5:23-3.14(b)16ix,** the proposed amendment would delete the references to Seismic Design Categories E and F in Section 1807.2.23.2 of the IBC/2000, entitled “Seismic Design Categories D, E, or F,” because there are no buildings that fall in Seismic Design Categories E or F in New Jersey.

**78. At N.J.A.C. 5:23-3.14(b)16x,** the proposed amendment would delete Section 1808.2.2.1 of the IBC/2000, entitled “Materials,” and would insert the text of Section

1821.2.2 of the 1996 BOCA National Building Code. Section 1808.2.2.1 of the IBC/2000 requires that concrete have a 28-day compressive strength of not less than 3,000 psi. The BOCA National Building Code requires that concrete have a 28-day compressive strength of not less than 4,000 psi. The Department is proposing that the current building subcode requirements be retained to ensure that there is no reduction of safety.

**79. At N.J.A.C. 5:23-3.14(b)17i,** the proposed amendment would modify Figure 2111.1 of the IBC/2000, entitled “Fireplace and Chimney Details,” at Letter B in the plan view illustration, to provide that the width of a hearth extension be eight, rather than six, inches. The text of Section 2111.10 of the IBC/2000 gives an eight-inch dimension for that measurement. In the plan view illustration of Figure 2111.1, Letter B is improperly dimensioned. Because the dimensions in the text and its accompanying illustration should be the same, the proposed amendment would insert the correct eight-inch dimension at Letter B in Figure 2111.1 of the IBC/2000.

**80. At N.J.A.C. 5:23-3.14(b)18,** the proposed amendment would delete Chapter 27, entitled “Electrical,” Chapter 28, entitled “Mechanical,” and Chapter 29 of the IBC/2000, entitled “Plumbing.” The enforcement requirements for these disciplines are covered by the adopted electrical, mechanical, and plumbing subcodes of the Uniform Construction Code at N.J.A.C. 5:23-3.16, N.J.A.C. 5:23-3.20, and N.J.A.C. 5:23-3.15, respectively.

**81. At N.J.A.C. 5:23-3.14(b)19i,** the proposed amendment to Section 3001.1 of the IBC/2000, entitled “Scope,” would include a cross-reference to N.J.A.C. 5:23-12, the elevator subcode of the Uniform Construction Code.

**82.** At **N.J.A.C. 5:23-3.14(b)19ii**, the proposed amendment to Section 3001.2 of the IBC/2000, entitled “Referenced standards,” would up-date references to the American Society of Mechanical Engineers (ASME) standards for elevators. In addition, the proposed amendment would delete the scope of Part XXIV of ASME A17.1, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater.” (See Issue 53)

**83.** At **N.J.A.C. 5:23-3.14(b)19iii**, the proposed amendment would create a new Section 3002.4.1 of the IBC/2000, entitled “Elevators in newly constructed multiple dwellings,” to require that elevators be able to accommodate ambulance stretchers that are 24 by 76 inches when installed in newly constructed multiple dwellings. This amendment incorporates statutory language (N.J.S.A. 52:27D-123.14) that is currently part of the building subcode.

**84.** At **N.J.A.C. 5:23-3.14(b)19iv**, the proposed amendment to Section 3004.4 of the IBC/2000, entitled “Closed vents,” would delete the provision for annealed glass and would retain the current building subcode provision for 0.125 inch plain glass. Requiring annealed glass in closed vents contributes a considerable cost to construction without providing a commensurate increase in life safety. Therefore, the Department is proposing that the current building subcode requirement be retained.

**85.** At **N.J.A.C. 5:23-3.14(b)19v**, the proposed amendment would delete the exception in Section 3004.5 of the IBC/2000, entitled “Plumbing and mechanical systems,” to eliminate the requirement for a drain or sump pump in an elevator pit. This provision of the IBC/2000 requires that a drain or sump pump be installed at the base of an elevator pit to remove any water that has accumulated. The Department believes that this requirement is excessive because if water accumulates in an elevator pit, and the elevator

is needed for fire fighting operations, fire department personnel have the equipment that is necessary to remove the water prior to use. Therefore, the Department proposes to delete the requirement in the IBC/2000 for drains or sump pumps in elevator pits.

**86. At N.J.A.C. 5:23-3.14(b)20i,** the proposed amendment would create a new Section 3102.3.2 of the IBC/2000, entitled “Certification,” which would include the text of Section 3104.6 of the 1996 BOCA National Building Code. Through this section, the building subcode currently requires that an affidavit or affirmation be submitted to the code official containing the following information: the name and addresses of the owners of a tent or air-supported structure, the date the fabric was last treated with a flame-resistant solution, the trade name or kind of chemical used, the name of the person or firm treating the material, and the name of the testing agency by which the fabric was tested. The IBC/2000 has no requirements for the certification of temporary structures. Therefore, the proposed amendments would retain the current requirements of the building subcode.

**87. At N.J.A.C. 5:23-3.14(b)20ii,** the proposed amendment would delete Section 3103.1.1 of the IBC/2000, entitled “Permit required.” The Department is proposing that the current building subcode requirements for temporary structures, tents with appurtenances, tents without appurtenances, and temporary greenhouses be retained.

**88. At N.J.A.C. 5:23-3.14(b)20iii,** the proposed amendment would delete Section 3109 of the IBC/2000, entitled “Swimming Pool Enclosures.” The provisions for swimming pools that are contained in the International Residential Code (IRC)/2000 are the same as those in the 1996 BOCA National Building Code. There are no swimming pool provisions in the IBC/2000. Therefore, the Department is proposing to retain in the

building subcode the provisions for swimming pools that were contained in the 1996 BOCA National Building Code to ensure that there are requirements for other than residential swimming pools in the building subcode.

**89. At N.J.A.C. 5:23-3.14(b)22i**, in Section 3303, entitled “Demolition,” of Chapter 33, entitled “Safeguards During Construction,” the proposed amendment would delete Section 3303.1, entitled “Construction documents,” Section 3303.2, entitled “Pedestrian protection,” Section 3303.4, entitled “Vacant lot,” Section 3303.5, entitled “Water accumulation,” and Section 3303.6, entitled “Utility connections,” because the provisions for demolition are covered by the Uniform Construction Code at N.J.A.C. 5:23-2.17.

**90. At N.J.A.C. 5:23-3.14(b)22iii**, in Section 3309, entitled “Fire Extinguishers,” the proposed amendment to Section 3309.1 of the IBC/2000, entitled “Where required,” would delete the reference to Section 906 of the IBC/2000 and would insert a reference to the International Fire Code. Section 906 of the IBC/2000 is proposed for deletion because the International Fire Code covers requirements for portable fire extinguishers on construction sites.

**91. At N.J.A.C. 5:23-3.14(b)23**, the proposed amendment would delete Chapter 34 of the IBC/2000, entitled “Existing Structures.” The Rehabilitation Subcode covers the requirements contained in this section of the IBC/2000 at N.J.A.C. 5:23-6.

**92. At N.J.A.C. 5:23-3.14(b)24i**, the proposed amendment to Chapter 35 of the IBC/2000, entitled “Referenced Standards,” would include a reference to ASME A18.1-1999, entitled “Safety Standard for Platform Lifts and Stairway Chairlifts,” with A18.1a-2001 addenda under the subheading “ASME.”

**93.** At **N.J.A.C. 5:23-3.14(b)24ii**, the proposed amendment would delete the references to NFPA 13-96, entitled “Installation of Sprinkler Systems,” NFPA 13D-96, entitled “Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,” and NFPA 13R-96, entitled “Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height” and would insert references to NFPA 13-99, entitled “Installation of Sprinkler Systems,” NFPA 13D-99, entitled “Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,” and NFPA 13R-99, entitled “Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height.”

The IBC/2000 adopts by reference the 1996 editions of NFPA 13. However, the 1996 edition of NFPA 13 is no longer available in print and can be obtained only by downloading from the Internet. 1999 is the more current edition of NFPA 13. In addition, the 1999 edition contains new technology that is in use by the sprinkler industry for sprinkler design. Therefore, the Department is proposing to adopt the 1999 editions of NFPA 13.

**94.** At **N.J.A.C. 5:23-3.14(b)24iii**, the proposed amendment would insert references to ANSI/NSPI-1, entitled “Standard for Public Swimming Pools,” ANSI/NSPI-2, entitled “Standard for Public Spas,” ANSI/NSPI-3, entitled “Standard for Permanently Installed Residential Spas,” ANSI/NSPI-4, entitled “Standard for Residential Above-Ground/On-Ground Swimming Pools,” and ANSI/NSPI-5, entitled “Standard for Residential In-ground Swimming Pools,” which are necessary as a result of the proposed amendments to Section 3109 of the IBC/2000. These references are necessary as a result of the proposed

amendments to Section 3109 of the IBC/2000, entitled “Swimming Pool Enclosures.”  
(See Issue 88)

**95. At N.J.A.C. 5:23-3.14(b)25i**, the proposed amendments would delete Appendix A, entitled “Employee Qualifications,” Appendix B, entitled “Board of Appeals,” Appendix C, entitled “Group U-Agricultural Buildings,” Appendix D, entitled “Fire Districts,” Appendix E, entitled “Supplementary Accessibility Requirements,” Appendix F, entitled “Rodent Proofing,” and Appendix G, entitled “Flood Resistant Construction.” The provisions in Appendixes B, C, E, and G are administrative and are covered by the Uniform Construction Code. The subjects covered by Appendixes A, D, and F are not construction issues. Therefore, the Department is proposing that Appendixes A, B, C, D, E, F, and G be deleted in their entirety.

**96. At N.J.A.C. 5:23-3.14(b)25ii**, in Appendix H, entitled “Signs,” the proposed amendment would delete the italicized text in the beginning of the Appendix. This text is proposed for deletion because it states that the Appendix is not mandatory. When text is proposed in the Uniform Construction Code it is intended to be enforced. Therefore, the sign provisions in the Appendix are proposed for adoption.

**97. At N.J.A.C. 5:23-3.14(b)25ii(1)**, the proposed amendment would delete Section H101.2, entitled “Signs exempt from permits,” in Appendix H because the Uniform Construction Code covers all permitting requirements for New Jersey.

**98. At N.J.A.C. 5:23-3.14(b)25ii(3) and (b)25ii(4)**, the proposed amendment to Appendix H, Section H106.1 of the IBC/2000, entitled “Illumination,” would delete the reference to the ICC Electrical Code. The electrical subcode of the Uniform Construction Code contains all of the technical requirements for electrical work at N.J.A.C. 5:23-3.16.

**99.** At **N.J.A.C. 5:23-3.14(b)25iii**, the proposed amendment would delete Appendix I and Appendix J of the IBC/2000, entitled “Patio Covers,” and “Supplementary Accessibility Requirements for Qualified Historic Buildings and Facilities,” respectively, because the provisions in these Appendixes are covered by the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6.

**2002 National Electrical Code (NEC/2002)**

**100.** At **N.J.A.C. 5:23-3.16(a)1 and (a)2**, the amendments would propose the adoption of the NEC/2002 as the technical subcode for the installation of electrical wiring and equipment.

**101.** At **N.J.A.C. 5:23-3.16(b)1 and (b)2**, the proposed amendments would delete Article 80 of the NEC/2002, entitled “Administration and Enforcement.” The Uniform Construction Code contains the administrative provisions for enforcing technical subcodes in New Jersey.

**102.** At **N.J.A.C. 5:23-3.16(b)3ii**, the proposed amendment would ensure that electrical subcode officials have jurisdiction over the electrical subcode unless otherwise noted.

**103.** At **N.J.A.C. 5:23-3.16(b)3iv**, the proposed amendment would delete the modified definition of the term “garage.” The definition of “garage” in the NEC/1999 was incomplete. The 2002 edition incorporates the changes the Department made to the definition to make it complete. Therefore, the modified definition of “garage” is no longer necessary.

**104.** At **N.J.A.C. 5:23-3.16(b)4i**, the proposed amendment would ensure that in Chapter 2 of the NEC/2002, entitled “Wiring and Protection,” the requirements for branch circuits at Article 210.12(B) of Article 210, entitled “Branch Circuits,” continue to be optional.



The NEC/2002 has a mandatory requirement for the use of arc fault circuit interrupters throughout all 125 volt single phase 15- and 20-ampere branch circuit outlets serving dwelling unit bedrooms. Making this provision an option, as opposed to a requirement, is consistent with the current requirements of the electrical subcode.

**105.** At **N.J.A.C. 5:23-3.16(b)5i**, the proposed amendment would update the section number, Article 300.4(A)(1) of the NEC/2002. In addition, the proposed amendment would change the distance from the edge of a hole on a nail plate to the nearest edge of a wood member from “1 ¼ inches (31.8 mm)” to “1 ¼ inches (32 mm). The Department is proposing that the metric value be rounded to the nearest whole number because it is more measurable.

**106.** At **N.J.A.C. 5:23-3.16(b)5ii**, the proposed amendment would delete Article 334.12(A)(1) of the NEC/2002. Article 334.10 of the NEC/2002 now allows the use of romex (Type NM, Type NMC, and Type NMS) cable in multistory buildings of Type III, IV, and V construction. However, Article 334.12(A)(1) prohibits the use of romex in drop or suspended ceilings in other than one- and two-family dwellings and in multifamily dwellings. Prohibiting the run of non-metallic sheathed cable in suspended or drop ceilings of commercial buildings has no technical justification. Therefore, the Department is proposing to delete the exception and allow the use of romex throughout buildings of Types III, IV and V construction.

**107.** At **N.J.A.C. 5:23-3.16(b)6i and (b)6ii**, the proposed amendment would update several section numbers, which is necessary as a result of the proposed adoption of the NEC/2002.

**108.** At **N.J.A.C. 5:23-3.16(b)6ii(1)**, the proposed amendment would update several section numbers and would include the term “renovation,” which is defined in the Rehabilitation Subcode at N.J.A.C. 5:23-6.

**109.** At **N.J.A.C. 5:23-3.16(b)6ii(1)(A)**, the proposed amendment would make the provisions in Article 550.25 of the NEC/2002, entitled “Arc-Fault Circuit Interrupter Protection,” consistent with Article 210.12(B). (See previous discussion at Issue 103.)

**110.** At **N.J.A.C. 5:23-3.16(b)6iii and (b)6iv**, the proposed amendments would update several section numbers.

#### **2000 International Residential Code (IRC/2000)**

**111.** At **N.J.A.C. 5:23-3.21(a)**, the IRC/2000 is proposed to be the technical subcode for the construction of one- and two-family dwellings in New Jersey.

**112.** At **N.J.A.C. 5:23-3.21(b)1**, the proposed amendment would scope the provisions of the IRC/2000 to apply to the construction of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) that are not more than three stories in height and that have a separate means of egress. These provisions would also apply to structures that are accessory to the dwellings.

**113.** At **N.J.A.C. 5:23-3.21(c)**, the proposed amendment would delete the modifications made to the 1995 edition of the Council of American Building Officials One- and Two-Family Dwelling Code (1995 CABO One- and Two-Family Dwelling Code) in their entirety and would propose the following modifications to the IRC/2000:

**114.** At **N.J.A.C. 5:23-3.21(c)1**, the proposed amendment would delete Chapter 1 of the IRC/2000, entitled “General Administration,” because the Uniform Construction Code contains all the administrative requirements for enforcing technical subcodes in New

Jersey. In addition, any section of Chapter 1 referenced in the IRC/2000 would be replaced with “the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23).”

**115.** At **N.J.A.C. 5:23-3.21(c)2**, the proposed amendments to Chapter 2 of the IRC/2000, entitled “Definitions,” would delete the definition of “addition,” “alteration,” “building, existing,” and “repair” because these terms are defined in the New Jersey Rehabilitation Subcode at N.J.A.C. 5:23-6. In addition, the proposed amendment would delete the definition of “building,” “building official,” and “owner” and would insert, in lieu thereof, the definitions for those terms that are proposed at N.J.A.C. 5:23-3.14. (See Issue 8) Furthermore, the proposed amendments would delete the definition of “manufactured home,” which is defined in the manufactured home subcode at N.J.A.C. 5:23-3.19 and would delete the definitions of “jurisdiction,” “permit,” and “person” because these terms are defined in Subchapter 2 of the Uniform Construction Code, entitled “Administration.” In addition, the proposed amendments would delete the definitions of “building line” and “existing installations” because these terms are not necessary. Finally, the proposed amendments would modify the definition of “approved” to mean approval by the building subcode official or other authority having jurisdiction, would modify the definition of “approved agency” to specify that authorities having jurisdiction, other than the building subcode official may approve the services of approved agencies as provided in the Uniform Construction Code at N.J.A.C. 5:23-4.3, and would modify the definition of “potable water” to replace the language “public health authority having jurisdiction” with “Public Health Drinking Water Standards or the regulations.”

**116.** At **N.J.A.C. 5:23-3.21(c)3i**, the proposed amendment to Section R301.2.1.1 of the IRC/2000, entitled “Design criteria,” would delete Item 2, which is a Southern Building Code Congress International standard (SSTD-10) for hurricane resistant residential construction. This section makes the IRC/2000 inapplicable in large parts of New Jersey because of the 110 mph wind cap. The Department believes other design options contain more sufficient requirements.

The Department is seeking public comment on the wind design criteria of the IRC/2000. (Also see Issues 137 and 139)

**117.** At **N.J.A.C. 5:23-3.21(c)3ii**, the proposed amendment to Section R301.2.1.2 of the IRC/2000, entitled “Internal pressure,” would delete the qualifying language “in one- and two-story buildings” in the exception. The limitation of the requirements to one- and two-story buildings is overly restrictive because wood structural panels can be installed on the inside or outside of openings. Therefore, the Department is proposing to delete the qualifying language.

**118.** At **N.J.A.C. 5:23-3.21(c)3iii**, in Table R301.2(1) in the IRC/2000, entitled “Climatic and Design Criteria,” the proposed amendment would fill in roof snow loads and wind pressure. As in the 1995 CABO One- and Two-Family Dwelling Code, this table requires the adopting jurisdiction to insert applicable values for roof snow loads and wind pressure. Therefore, values that match the values in Table R301.2a of the one- and two-family dwelling code are proposed for insertion.

**119.** At **N.J.A.C. 5:23-3.21(c)3iv**, the proposed amendment to Section R301.2.2 of the IRC/2000, entitled “Seismic provisions,” would provide that single-family townhouses and detached one- and two-family dwellings that fall in Seismic Design Category C are

exempt from the seismic requirements in the IRC/2000. This amendment is intended to extend to townhouses the exemption from the seismic provisions given to single-family detached homes.

**120.** At **N.J.A.C. 5:23-3.21(c)3v**, the proposed amendment would delete Section R303.4 of the IRC/2000, entitled “Stairway illumination.” The requirements contained in this Section of the IRC/2000 are covered by the electrical subcode of the Uniform Construction Code at N.J.A.C. 5:23-3.16.

**121.** At **N.J.A.C. 5:23-3.21(c)3vi**, the proposed amendment would delete Section R303.6 of the IRC/2000, entitled “Required heating,” because the Uniform Construction Code does not require heating.

**122.** At **N.J.A.C. 5:23-3.21(c)3vii**, the proposed amendment to Section R308.4 of the IRC/2000, entitled “Hazardous locations,” would delete Item 9. In the same section, Exception 9 would be deleted. Item 9 requires glazing of glass installed in walls that enclose stairway landings or that is installed in walls within 60 inches of the top and bottom of stairways where the bottom edge of the glass is less than 60 inches above the walking surface; the code text specifies that these are hazardous locations. Exception 9 then exempts from the glazing requirements glass in walls that enclose stairway landings and glass installed in walls within 60 inches of the top and bottom of stairways when the bottom edge of the glass is less than 60 inches above the walking surface. These locations are not classified as “hazardous” in the 1995 CABO One- and Two-Family Dwelling Code. The Department is not aware of any data showing a recognizable hazard. Therefore, the Department is proposing that the current provisions of the building subcode be retained and that Exception 9 be deleted for consistency.

**123.** At **N.J.A.C. 5:23-3.21(c)3viii**, the proposed amendment would delete the text of Section R309.2 of the IRC/2000, entitled “Separation required,” and would retain the requirements for private garages found in the 1995 CABO One- and Two-Family Dwelling Code. This section of the IRC/2000 is less restrictive than the requirements currently found in the 1995 CABO One- and Two-Family Dwelling Code and one of the fundamental principles of the review of the building subcode and the International Code Council model codes is that the Department not step backward on technical requirements. Therefore, the proposed amendment would retain the requirements of the building subcode that a 1-hour garage separation be provided.

**124.** At **N.J.A.C. 5:23-3.21(c)3ix**, the proposed amendment to Section R310.1 of the IRC/2000, entitled “Emergency escape and rescue required,” would limit the requirement of egress windows in sleeping rooms. This section of the IRC/2000 provides that basements and sleeping rooms be provided with egress windows. The Department believes that providing an egress window is a reasonable requirement for a sleeping room, but is not so reasonable in basements without sleeping rooms. This restriction does not exist in the 1995 CABO One- and Two-Family Dwelling Code. Therefore, the requirement of an egress window in a basement is proposed for deletion.

**125.** At **N.J.A.C. 5:23-3.21(c)3x, (c)3xi, and (c)3xii**, the proposed amendments would retain the existing requirements for stair geometry that are contained in the building subcode.

**126.** At **N.J.A.C. 5:23-3.21(c)3xiii**, the proposed amendment would delete Section R314.7 of the IRC/2000, entitled “Illumination.” The requirements contained in this section are covered by the electrical subcode at N.J.A.C. 5:23-3.16.

**127.** At **N.J.A.C. 5:23-3.21(c)3xiv**, the proposed amendment would delete Section R315 of the IRC/2000, entitled “Handrails,” and would insert the text of Section 315.1 of the 1995 CABO One- and Two-Family Dwelling Code. The current requirement in the 1995 CABO One- and Two-Family Dwelling Code requires handrails on stairs with three or more risers. Section R315 of the IRC/2000 requires handrails on stairs with two or more risers. In addition, the minimum height for handrails was changed from 30 inches to 34 inches. There was no technical justification for these changes. Therefore, the Department is proposing that the requirements of the current building subcode be retained.

**128.** At **N.J.A.C. 5:23-3.21(c)3xv**, the proposed amendment to Section R316.2 of the IRC/2000, entitled “Guard opening limitations,” would delete the provision that required guards not be constructed with horizontal rails or other ornamental patterns that result in a “ladder effect.” The Uniform Construction Code was amended recently to delete the term “ladder effect” and to allow ornamental guardrails. The proposed amendment would retain that provision of the building subcode.

**129.** At **N.J.A.C. 5:23-3.21(c)3xvi**, the proposed amendment would delete Section R317.1.1 of the IRC/2000, entitled “Alterations, repairs and additions.” The New Jersey Rehabilitation Subcode contains all the requirements for work done in existing structures. Therefore, the proposed amendment would delete this section of the IRC/2000.

**130.** At **N.J.A.C. 5:23-3.21(c)3xvii**, the proposed amendment to Section R317.2 of the IRC/2000, entitled “Power Source,” would delete the provision dealing with the installation of smoke alarms in buildings without commercial power or in buildings that

undergo alterations, repairs, or additions. The Rehabilitation Subcode covers these requirements.

**131.** At **N.J.A.C. 5:23-3.21(c)3xviii**, the proposed amendment to Section R321.1 of the IRC/2000, entitled “Two-family dwellings,” would allow a fire resistance rating of ½ hour in buildings equipped with an automatic sprinkler system that is installed in accordance with NFPA 13R or 13D. This section of the IRC/2000 allows this fire resistance rating if a building is installed with a sprinkler system conforming to NFPA 13. The Department believes that the 13R and 13D sprinkler systems are equally as appropriate as NFPA 13 systems in two-family dwellings. Therefore, the proposed amendment would allow the use of 13R and 13D sprinkler systems in two-family dwellings. (For a complete discussion of the difference between 13R and 13D sprinkler systems, see Issue 19.)

**132.** At **N.J.A.C. 5:23-3.21(c)3xix**, the proposed amendment would delete Section R325.1 of the IRC/2000, entitled “Site address.” This section of the IRC/2000 requires a house number to be legible from the street. This is an emergency response, not a construction, issue. Therefore, the Department is proposing that this section be deleted in its entirety.

**133.** At **N.J.A.C. 5:23-3.21(c)4i**, in Table R401.4.1 of the IRC/2000, entitled “Presumptive Load Bearing Values of Foundation Materials,” the proposed amendment would delete “12,000; 4,000; 3,000; 2,000; and 1,500<sup>b</sup>,” and would insert “12,000; 6,000; 5,000; 3,000; and 2,000,” This table in the IRC/2000 reduces load-bearing values for various soils; the IRC/2000 uses a safety factor of 3, while the 1995 CABO One- and Two-Family Dwelling Code uses a safety factor of 2. The United State Department of



Housing and Urban Development's "Residential Guides: 2000 edition," indicates that a safety factor of 2 is sufficient. Therefore, the Department is proposing that this section be amended to use a safety factor of 2.

**134.** At N.J.A.C. 5:23-3.21(c)4ii and (c)4iii, the proposed amendments to Section R404.1, entitled "Concrete and masonry foundation walls," and Section R404.4 of the IRC/2000, entitled "Insulating concrete form foundation walls," would delete the requirements that provide that construction documents are not required to be signed and sealed by a design professional when concrete and masonry foundation walls or insulating concrete form foundation walls are designed in accordance with the American Concrete Institute (ACI) standards or in accordance with Sections R404.1 and R404.4 of the IRC/2000. The requirements for the signing and sealing of construction documents by design professionals are contained in the Uniform Construction Code at N.J.A.C. 5:23-2.15(e)1viii.

**135.** At N.J.A.C. 5:23-3.21(c)4iv, the proposed amendment would delete Sections R405 and R406 of the IRC/2000, entitled "Foundation Drainage," and "Foundation Waterproofing and Dampproofing," respectively, and would insert the text of Section 1806 of the IBC/2000, entitled "Dampproofing and Waterproofing." The requirements for dampproofing and waterproofing in the 1995 CABO One- and Two-Family Dwelling Code and the IRC/2000 are the same. The requirements for dampproofing and waterproofing of the 1996 BOCA National Building Code and the IB/2000 are the same. The current building subcode allows one- and two-family dwellings to be constructed in accordance with either the 1996 BOCA National Building Code or the 1995 CABO One- and Two- Family Dwelling Code. The IRC/2000 contains all the requirements for one-

and two- family dwellings. The requirements for dampproofing and waterproofing in the IRC/2000 are inadequate. Therefore, the Department proposes to retain the current building subcode requirements.

**136.** At **N.J.A.C. 5:23-3.21(c)5i**, the proposed amendment to Figure R602.6.1 in the IRC/2000, entitled “Notching and Bored Hole Limitations for Exterior Walls and Bearing Walls,” would retain the 1995 CABO One- and Two-Family Dwelling Code requirement for 3-8 penny (d) nails, as opposed to the requirement for six-16d nails in the IRC/2000. If six-16d nails were used on each side of a 2’ by 4’ that is notched, there would be no 2’ by 4’ remaining. Therefore, the Department is proposing that the current requirement for 3-8d nails be retained.

**137.** At **N.J.A.C. 5:23-3.21(c)5ii**, the proposed amendment to Table R602.10.3 of the IRC/2000, entitled “Wall Bracing,” under the column, “Seismic Design Category or Wind Speed,” would delete the basic wind speed of “less than 110 mph” for Seismic Design Category D buildings and would insert a basic wind speed of “less than 120 mph.” The IRC/2000 provides wall bracing requirements for construction where wind speeds are less than 110 mph. The 1995 CABO One- and Two-Family Dwelling Code, at Table 301.2(b), provides design winds loads according to exposure classifications, building heights, and number of stories. In some instances, in Table 301.2(b), for certain wind loads, there are no additional bracing requirements. Where a wind load pressure is provided, exterior wall bracing is required in accordance with Section 602.3 of the 1995 CABO One- and Two-Family Dwelling Code, which provides that exterior walls that are subject to wind pressures of 30 psf or greater shall be designed in accordance with accepted engineering practices. The Department has conducted research and performed

calculations and has determined that the wall bracing required by Table R602.10.3 of the IRC/2000 for Seismic Design Category D buildings is sufficient for a maximum wind speed of 120 mph. Therefore, the Department is proposing that the maximum allowable wind speed for determining the amount of wall bracing for buildings that fall in Seismic Design Category D be 120 mph.

An additional issue regarding the wind requirements of the IRC/2000 is the cost impact the requirements might have on the construction of single-family homes. One of New Jersey's leading builders submitted to the Department a comprehensive cost analysis of the wind requirements that are contained in the IRC/2000 versus the wind requirements of the 1995 CABO One- and Two-Family Dwelling Code. Upon review, the Department determined that the assumptions about the loading conditions in this analysis were conservative and included not only wind, but also snow loads. Nevertheless, the analysis showed that all these requirements of the IRC/2000 when compared to the requirements in the 1995 CABO One- and Two-Family Dwelling Code would increase the cost of building a single-family home by approximately 2%. The Department believes that it is unlikely that these conditions would apply to a single site and that this increase is insignificant when compared to the total cost of building single-family homes. Therefore, the Department is proposing that the requirements in the IRC/2000 on wind be adopted.

**138. At N.J.A.C. 5:23-3.21(c)5iii and (c)5iv,** the proposed amendment would delete Section R606.1 of the IRC/2000, entitled "Professional registration not required" and the second sentence of Section R611.1 of the IRC/2000, entitled "General." These sections contain provisions for when the signing and sealing of construction documents is not

required. Construction documents are required to be signed and sealed. Requirements for the signing and sealing of construction documents by design professionals are contained in the Uniform Construction Code at N.J.A.C. 5:23-2.15(e)1viii.

**139.** At **N.J.A.C. 5:23-3.21(c)6i**, the proposed amendment would delete Table R802.11 of the IRC/2000, entitled “Required Strength of Truss or Rafter Tie-Down Connections to Resist Wind Uplift Forces<sup>a,b,c,d</sup>,” and would retain Table 802.12 of the 1995 CABO One- and Two-Family Dwelling Code. Table R802.11 in the IRC/2000 differs from the table in the 1995 CABO One- and Two-Family Dwelling Code in that the table in the IRC/2000 establishes maximum wind uplift pressure values to a basic wind speed of less than 110 mph. The Department is proposing that Table R802.12 of the 1995 CABO One- and Two-Family Dwelling Code be retained, which includes values for wind uplift pressures of 70, 80, and 90 psf, which allows the CABO table to be used for basic wind speeds that are greater than 110 mph. There are areas in New Jersey where the design wind speed is greater than 110 mph. Therefore, the Department proposes to retain Table 802.12 from the 1995 CABO One- and Two-Family Dwelling Code, which is in the current building subcode. (See Issue 137 for a companion discussion.)

**140.** At **N.J.A.C. 5:23-3.21(c)7i and (c)7ii**, the proposed amendment would delete the minimum 12-inch clearance to combustibles requirement in Exception 3 of Section R1001.15 of the IRC/2000, entitled “Chimney clearances,” and Section R1003.12 of the IRC/2000, entitled “Fireplace clearance,” and would insert a clearance requirement of six inches. Twelve inches is double the current required width of the chimney and masonry walls. The 1995 CABO One- and Two-Family Dwelling Code requires a minimum six-inch clearance to combustibles. The 1996 BOCA National Building Code, at Section

2115.5, requires a minimum two-inch chimney airspace clearance to combustibles for chimneys located within the exterior wall of a building and 1-inch clearance for chimneys located outside the exterior walls of a building. In addition, for fireplaces, the 1996 BOCA National Building Code, at Section 2113.6, requires a minimum six-inch clearance to combustibles attached to the fireplace face. The proposed amendment would retain the clearance requirement from the current building subcode.

**141.** At N.J.A.C. 5:23-3.21(c)8, the proposed amendment would delete Chapter 11 of the IRC/2000, entitled “Energy Efficiency.” New Jersey’s energy requirements are covered by the energy subcode of the Uniform Construction Code.

**142.** At N.J.A.C. 5:23-3.21(c)9i, the proposed amendment would delete Section M1202 of the IRC/2000, entitled “Existing Mechanical Systems.” Because the Rehabilitation Subcode covers these requirements, the Department is proposing that this section of the IRC/2000 be deleted.

**143.** At N.J.A.C. 5:23-3.21(c)10, the proposed amendments to Part VI of the IRC/2000, entitled “Fuel Gas,” in Section G2403, entitled “General Definitions,” would delete the definition of “code.” In addition, the definition of “code official” would be modified to mean the appropriate subcode official as defined by N.J.A.C. 5:23-3.4, entitled “Responsibilities,” and in the definition of “labeled,” the term “authority having jurisdiction” would be replaced with the term “construction official.” This same change would be made in Appendix A of the IRC/2000, entitled “Sizing and Capacities of Gas Piping,” at Letters (e) and (d) (proposed at N.J.A.C. 5:23-3.21(c)13i). In the definition of “listed,” the term “authority having jurisdiction” would be replaced with “Uniform Construction Code (N.J.A.C. 5:23).” The proposed amendments would delete Section

G2404.5, entitled “Repair,” Section G2409.4.6, entitled “Unlisted central heating furnaces,” and Section G2413.3 of the IRC/2000, entitled “Other materials.” Finally, the proposed amendments would update section numbers, would make clear that the installation of liquefied petroleum gas containers on roofs is prohibited, and would require that chimneys be inspected in accordance with the Chimney Certification Program, which is defined in the test and special inspection section of the Uniform Construction Code at N.J.A.C. 5:23-2.20(c).

These proposed amendments are necessary to bring the IRC/2000 into conformance with the fuel gas subcode of the Uniform Construction Code (N.J.A.C. 5:23-3.22).

**144. At N.J.A.C. 5:23-3.21(c)11,** the proposed amendment would delete Part VII of the IRC/2000, entitled “Plumbing.” Plumbing requirements are regulated by the plumbing subcode of the Uniform Construction Code at N.J.A.C. 5:23-3.15.

**145. At N.J.A.C. 5:23-3.21(c)12,** the proposed amendments would delete Part VIII of the IRC/2000, entitled “Electrical.” Electrical requirements are regulated by the electrical subcode of the Uniform Construction Code at N.J.A.C. 5:23-3.16.

**146. At N.J.A.C. 5:23-3.21(c)13ii,** the proposed amendments would delete Appendix D, entitled “Recommended Procedure for Safety Inspection of an Existing Appliance Installation,” Appendix E, entitled “Manufactured Housing Used as Dwellings,” and Appendix F, entitled “Radon Control Methods.” Appendix D is proposed for deletion because it is unnecessary. Under the Uniform Construction Code, once a Certificate of Occupancy is issued for a building, inspections of existing appliance installations are not required. Appendixes E and F are proposed for deletion because manufactured housing

and radon are regulated by the Uniform Construction Code at N.J.A.C. 5:23-3.19 and N.J.A.C. 5:23-10, respectively.

**147. At N.J.A.C. 5:23-3.21(c)13iii,** the proposed amendment would delete the definition of “swimming pool” in Appendix G, Section AG102.1, entitled “General,” and would provide that any structure intended for swimming or recreational bathing that is greater than 24 inches in depth and greater than 250 square feet be considered a swimming pool for the purposes of applying this section. The proposed amendment retains the current requirement from the 1995 CABO One- and Two-Family Dwelling Code.

**148. At N.J.A.C. 5:23-3.21(c)13iv,** the proposed amendment would delete Provision 9 in Appendix G, Section AG105.2 of the IRC/2000, entitled “Outdoor swimming pool.” Provision 9 requires an audible alarm on a door that provides direct access to a pool. This same requirement was deleted from the 1996 BOCA National Building Code because door alarms are excessive and unenforceable. Where the back door leads to a swimming pool, this requirement would provide that an alarm sound every time the back door is opened. Therefore, the Department is proposing that provision 9 be deleted in its entirety and the current building subcode requirements be retained.

**149. At N.J.A.C. 5:23-3.21(c)13v,** the proposed amendment would delete Appendix H, entitled “Patio Covers,” Appendix I, entitled “Private Sewage Disposal,” and “Appendix J, entitled “Existing Buildings,” are deleted in their entirety. Patio covers and sewage disposal are maintenance, not construction, issues. The New Jersey Rehabilitation Subcode covers requirements for existing buildings.

**150. At N.J.A.C. 5:23-12.12(b),** the proposed amendment would delete the cross-reference to Section 3003.3 of the 1996 BOCA National Building Code, which contains

requirements for the numbering of elevator cars. The IBC/2000 does not contain a similar section. However, ASME A17.1, which is referenced at N.J.A.C. 5:23-12.12(b), contains similar numbering requirements. Therefore, the Department is proposing that the reference to the 1996 BOCA National Building Code be deleted.

A 60-day public comment period is provided and, therefore, pursuant to N.J.A.C. 1:30-3.3(a)5, the proposal is not subject to the provisions of N.J.A.C. 1:30-3.1 and 3.2 governing rule making calendars.

### **Social Impact**

Adopting the 2000 editions of the IBC and IRC and the 2002 edition of the NEC would have a positive social impact in that it would afford members of the construction industry the use of new technologies and innovative materials, which is a central provision of the Uniform Construction Code Act. In addition, the citizens of the State New Jersey would benefit from the economies and efficiencies that result from the use of newer technologies while continuing to be provided with safe buildings. Finally, this proposal continues New Jersey's practice of maintaining a single, clear set of technical standards for construction.

### **Economic Impact**

The overall economic benefit of adopting the 2000 editions of the IBC and IRC and the 2002 edition of the NEC, which reflect the most current building technologies, is that those technologies are state of the art and are often more cost effective than the technologies they replace. Economic impact will vary from situation to situation. However, because the Department is empowered by the Uniform Construction Code Act to adopt only those provisions that are warranted by improvements in technology and that



help control the cost of construction, those provisions that would have imposed any unnecessary costs to citizens have been deleted from the model codes by these proposed amendments. Therefore, the Department anticipates that any costs imposed as a result of these proposed amendments would be outweighed by the increased safety of the buildings.

### **Federal Standards Statement**

No Federal standards analysis is required because these amendments are not being proposed in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

### **Jobs Impact**

The Department does not anticipate that any jobs will be created or lost as a result of these proposed amendments.

### **Agriculture Industry Impact**

The Department does not anticipate that the proposed amendments would have an impact on the agricultural industry because the existing Uniform Construction Code requirements for commercial farm buildings are being retained.

### **Regulatory Flexibility Statement**

Because the administrative structure of the Uniform Construction Code is not changed, the proposed amendments would not impose any recordkeeping or reporting requirements on “small businesses,” as defined by the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. The proposed amendments might impose new technical requirements depending upon the scope of the construction project. However, there is no

basis for the differential treatment of small businesses because any new requirements would be beneficial to the health, safety, and welfare of the people.

### **Smart Growth Impact**

Due to the subject matter of this proposal, the Department expects that it would have a positive impact on the achievement of “smart growth” or implementation of the State Plan. Smart growth is facilitated by a construction code that provides uniformity, establishes predictability, and allows the use of new technologies.

**Full text** of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

5:23-2.14 Construction permits – when required

(a) (No change)

(b) The following are exceptions from (a) above:

1.-3. (No change)

4. Permit requirements for tents and membraned structures shall be [as set forth] in **accordance with** N.J.A.C. 5:23-3.14(b)[22]**20**ii. A temporary greenhouse meeting the criteria of N.J.A.C. 5:23-3.14(b)[22]**20**ii(4) shall not require a permit except as otherwise provided in N.J.A.C. 5:23-3.14(b)[22]**20**ii(5).

5.-9. (No change)

(c) – (e) (No change)

5:23-2.15 Construction permits application

(a) – (d) (No change)

(e) Plans, plan review, plan approval:

1. Plans and specifications: The application for [the] **a** permit shall be accompanied by no fewer than two copies of specifications and of plans drawn to scale, with sufficient clarity and detailed dimensions to show the nature and character of the work to be performed. Plans submitted shall [only] be required to show **only** such detail and **to** include **only** such information as shall be reasonably necessary to [assure] **ensure** compliance with the requirements of the code and these regulations. When quality of materials is essential for conformity to the regulations, specific information shall be given to establish such quality; and this code shall not be cited, or the term “legal” or its equivalent be used as a substitute for specific information.

i. - ix. (No change)

**x. Those portions of the design that are not submitted at the time of application shall be listed by the design professional as part of the application.**

**(1) All documents shall be reviewed by the design professional and submitted with a letter indicating that they have been reviewed and found to be in conformance with the regulations for the design of the building.**

Renumber x. as xi. (No change in text)

2.-3. (No change)

5:23-2.20 Tests and special inspections

(a) All tests [and special inspections] required by the provisions of the regulations shall be made and conducted under the supervision of the enforcing agency and in accordance with such inspection and test procedures as may be prescribed by the provisions of the

regulations, with the expense of all test and inspections to be borne by the owner or lessee, or the contractor performing the work.

**(b) All special inspections, as provided in the building subcode, shall apply to Class I buildings. A special inspector shall be independent of the contractor and shall be responsible to the building owner or building owner's agent.**

Redesignate (b) - (d) as (c) - (e) (No change in text)

#### 5:23-3.14 Building Subcode

(a) Rules concerning the building subcode are [adopted] as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the [Building Officials and Code Administrators International, Inc., known as the "BOCA National Building Code/1996"] **International Code Council, International Building Code, known as the "IBC/2000."**

This code is hereby adopted by reference as the building subcode for New Jersey subject to the modifications stated in (b) below.

i. Copies of this code may be obtained from [the sponsor at BOCA, International,] **the International Code Council at** 4051 [W.] **West** Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. ["The BOCA National Building Code/1996,"] **The IBC/2000, as amended,** may be known and cited as the "building subcode."

2. Any references to the mechanical code, plumbing code, [CABO One and Two Family Dwelling Code] **International Residential Code**, [CABO] **ICC** A117.1 standard (including reference to chapter 11) or [NFPA 70] **the ICC Electrical Code** listed in

Chapter 35 shall be considered a reference to the appropriate adopted mechanical, plumbing, one- and two- family dwelling or electrical subcode referenced in N.J.A.C. 5:23-3 or to the [barrier-free] **barrier free subcode**, N.J.A.C. 5:23-7, as appropriate.

(b) The following chapters of the building subcode are modified as follows:

[1. Chapter 1 of the building subcode, entitled "Administration," is deleted in its entirety.

2. The following amendments are made to Chapter 2 of the building subcode, entitled "Definitions," section 202.0, general definitions:

i. The term and definition of "Additions" is deleted;

ii. The definition of the term "Agricultural building" is amended to add a sentence as follows: "Structures qualifying under the Uniform Construction Code definition of Commercial Farm Buildings may be built according to the regulations at N.J.A.C. 5:23-3.2(d).";

iii. The definition of the term "Approved" is amended to delete the phrase "or other authority";

iv. The phrase and definition of "Approved material, equipment and methods" is deleted;

v. The term and definition of "Approved rules" is deleted;

vi. The term and definition "Attic, habitable" are added from the 1990 BOCA National Building Code as follows: "Attic, habitable: A habitable attic is an attic which has a stairway as a means of access and egress and in which the ceiling area at a height of seven feet above the attic floor is not more than one third of the area of the next floor below."

- vii. The definition of the term "Building" is deleted and replaced by the definition at N.J.A.C. 5:23-1.4;
- viii. The term and definition of "Building, existing" is deleted;
- ix. The term and definition of "Building line" is deleted;
- x. The term and definition of "Building service equipment" is deleted and replaced by the term and definition of "equipment" at N.J.A.C. 5:23-1.4;
- xi. The definition of the term "Code official" is deleted and is redefined herein and throughout the subcode as the "building subcode official" as defined in N.J.A.C. 5:23-1.4 unless indicated otherwise;
- xii. The term and definition of "Equipment, existing" is deleted;
- xiii. The terms and definitions of "hereafter" and "heretofore" are deleted;
- xiv. The term and definition of "Jurisdiction" is deleted;
- xv. The term and definition of "Occupancy, change of" is deleted;
- xvi. The definition of "Owner" is deleted and replaced by the definition at N.J.A.C. 5:23-1.4;
- xvii. The term and definition of "Permit" is deleted;
- xviii. The term and definition of "Person" is deleted;
- xix. The term and definition of "Repair" is deleted;
- xx. The definition of the term "Structure" is replaced by the definition at N.J.A.C. 5:23-1.4;
- xxi. The term and definition "Structure, existing" is deleted;
- xxii. The term and definition of "Writing" is deleted;
- xxiii. The term and definition of "Zoning" is deleted.

3. The following amendments are made to Chapter 3 of the building subcode, entitled "Use or Occupancy."

- i. Section 301.2 is deleted;
- ii. Section 307.8 is amended to replace the term "less" in the second line of exception #3 with the term "more."
- iii. Section 310.6 is amended to delete the phrase "not more than three stories in height."
- iv. Section 312.0 is deleted and substitute in lieu thereof section 312.0 of the 1993 BOCA National Building Code as follows: "312.0 Utility and Miscellaneous Use Group--312.1 General: Buildings and structures of an accessory character and miscellaneous structures not classified in any specific use group shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Use Group U shall include fences over 6 feet (1829 mm) high, tanks, cooling towers, retaining walls and buildings such as private garages, carports, sheds and agricultural buildings."
- v. Table 313.1.2 is modified to delete Use Group U from the table.

4. The following amendments are made to Chapter 4 of the building subcode, entitled "Special Use and Occupancy";

- i. Section 415.1 is amended to replace the phrase "authority having jurisdiction" with the term "construction official";
- ii. Section 416.11 is deleted;
- iii. Section 420.0 is amended to replace the terms "Mobile Units," "Unit" and "Units" with the terms "Manufactured Homes," "Home" and "Homes" respectively;

- iv. Sections 420.1 and 420.2 are deleted in their entirety;
- v. Section 421.3 is amended to replace the term "code official" with the term "construction official";
- vi. Section 421.6 is amended to end with the phrase "in accordance with the plumbing subcode";
- vii. Section 421.6.1 is deleted;
- viii. Section 421.6.2 is amended to end with the phrase "in accordance with the plumbing subcode";
- ix. Section 421.9.3 is amended to replace the term "governing body" with the term "construction official."
- x. Section 421.10.1 #9 of the 1996 BOCA National Building Code is deleted in its entirety.

5. The following amendment is made to Chapter 5 of the building subcode, entitled "General Building Limitations":

- i. Table 503 is modified to delete Use Group U from the table.

6. The following amendments are made to Chapter 7 of the building subcode, entitled "Fireresistant Material and Construction":

- i. Table 705.2 is modified to delete U<sup>d</sup> in the second column and U<sup>c</sup> in the fourth column under the heading of Use Group. Delete "Note c" and "Note d" of the table.
- ii. Table 707.1 is modified to delete U under the heading of Use Group in the second row.
- iii. Section 721.6.5 is deleted and substitute in lieu thereof the text of



Section 720.6.5 of the 1993 BOCA National Building Code as follows: "Architectural Trim: Fireblocking shall be installed in exterior cornices and other exterior architectural elements where permitted of combustible construction in Section 1406.0, or where erected with combustible frames, at maximum intervals of 20 feet (6096 mm). If noncontinuous, such elements shall have closed ends, with at least 4 inches (102 mm) of separation between sections."

iv. Section 723.6 is deleted in its entirety.

7. The following amendments are made to Chapter 8 of the building subcode, entitled "Interior Finishes":

i. Table 803.4 is modified to delete U under the heading of Use Group in the eighth row.

ii. Sections 805.1, 805.2.1, 807.2.1 and 807.2.2 are amended to replace the term "code official" with the term "fire protection subcode official."

8. The following amendments are made to Chapter 9 of the building subcode, entitled "Fire Protection Systems":

i. References to the term "code official" shall be replaced with the term "fire protection subcode official."

ii. Section 901.4 is deleted in its entirety;

iii. Section 903.1 is amended to replace the term "department" with the phrase "enforcement agency responsible for plan review," and in the note, to replace the word "Since" with the term "If";

iv. Section 917.0 is amended to replace the phrase "administrative authority of the jurisdiction" with the term "fire protection subcode official;"

v. Section 921.0 is deleted in its entirety.

9. The following amendments are made to Chapter 10 of the building subcode, entitled "Means of Egress":

i. Section 1001.2 is amended to replace the phrase "Article 1 for modification of this code or by adoption of approved rules" with the regulations at "N.J.A.C. 5:23-2";

ii. Section 1005.5 is deleted and substitute in lieu thereof Section 1005.5 of the 1993 BOCA National Building Code as follows: "1005.5 Open-sided floor areas: Guards shall be located along open-sided walking surfaces, mezzanines and landings which are located more than 30 inches (762 mm) above the floor or grade below. The guards shall be constructed in accordance with Section 1021.0. Exception: Guards are not required on the loading side of loading docks and the auditorium side of stages and raised platforms."

iii. Section 1005.6 is deleted and substitute in lieu thereof section 1005.6 of the 1993 BOCA National Building Code as follows: "1005.6 Elevation Change: Where changes in elevation exist in exit access corridors, exits or exit discharge, ramps shall be used where the difference in elevation is less than 12 inches (305 mm). Exception: A maximum step height of 8 inches (203 mm) shall be permitted for buildings with occupancies in Use Groups F, H, R and S at exterior doors not required to be accessible by Chapter 11."

iv. Section 1014.6 exception #8 is modified to replace the first sentence with the text of Section 1014.6 exception #8 of the 1993 BOCA National Building Code and retain the 1996 text for the second sentence as follows:

"8. In occupancies in Use Group R-3 and within dwelling units in occupancies in Use Group R-2, the maximum riser height shall be 8 1/4 inches (210 mm) and the minimum tread depth shall be 9 inches (229 mm). A nosing of not less than 3/4 inches (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with a solid riser where the tread depth is less than 11 inches (279 mm)."

v. Section 1014.6.3 is deleted and substitute in lieu thereof Section 1014.6.3 of the 1993 BOCA National Building Code as follows: "1014.6.3 Winders: Winders shall not be permitted in required means of egress stairways except in occupancies in Use Group R-3 and stairways serving a single dwelling unit. Such winders shall have a tread depth of not less than 9 inches (229 mm) at a point not more than 12 inches (305 mm) from the side where the tread is narrower and the minimum tread depth shall not be less than 6 inches (152 mm)."

vi. Section 1014.9.1 is deleted and substitute in lieu thereof Section 1014.9.1 of the 1993 BOCA National Building Code as follows: "1014.9.1 Strength: All stairways, platforms and landings in other than occupancies in Use Group R-3 shall be adequate to support a live load of 100 pounds per square foot (488.20 kg/m<sup>2</sup>) and a concentrated load of 300 pounds (136.20 kg)."

vii. Section 1017.1.1 is amended to add the word "nominal" at the end of the sentence at exception #2.

viii. Section 1021.2 exception #1 is deleted and substitute in lieu thereof Section 1021.2 exception#1 of the 1993 BOCA National Building Code as follows: "1. In other than occupancies in Use Group E, guards shall not be less than 34 inches (864 mm) in height above the leading edge of the tread along stairs which are not more than 20

feet (6096 mm) in height or which reverse direction at an intermediate landing with 12 inches (305 mm) or less measured horizontally between successive flights."

ix. In Section 1021.3, sentences 1 and 2 and Exceptions 1 and 2 shall be deleted and Section 824.3 of the 1990 BOCA National Building Code shall be inserted as follows: "Opening limitations: In buildings of Use Groups A, B, E, I-1, I-2, M and R, and in public garages and open parking structures, open guards shall have balusters or other construction such that a sphere with a diameter of 4 inches (102 mm) cannot pass through any opening.

Exception: The triangular openings formed by the riser, tread, and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere 6 inches (152 mm) in diameter cannot pass through the opening. In buildings of Use Groups I-3, F, H, and S, other than public garages and open parking structures, the construction shall not permit a sphere with a diameter of 21 inches (533 mm) to pass through any opening."

x. Section 1021.2, exception #3 is deleted in its entirety.

xi. Section 1022.2 and the exception are deleted and substitute in lieu thereof Section 1022.2 of the 1993 BOCA National Building Code as follows: "1022.2 Handrail details: Handrail-gripping surface shall be continuous, without interruption by newel posts, other structural elements or obstructions. A handrail and any wall or other surface adjacent to the handrail shall be free of any sharp or abrasive elements. The clear space between the handrail and the adjacent wall or surface shall not be less than 1 1/2 inches (38 mm). Edges shall have a minimum radius of 1/8 inch (3 mm)."

xii. Section 1022.2.2 exception #1 is deleted and substitute in lieu thereof Section 1022.2.2 exception #1 of the 1993 BOCA National Building Code as follows: "1.

Handrails that form part of a guard shall have a height not less than 34 inches (864 mm) and not more than 42 inches (1067 mm)."

xiii. Section 1022.2.4 is deleted and substitute in lieu thereof the text of Section 828.2.4 of the 1987 BOCA National Building Code as follows: "Handrail grip size: For all stair handrails located within a dwelling unit, the maximum horizontal cross-sectional dimension of the handrails shall not exceed 2 5/8 inches (67 mm)."

xiv. Section 1024.1 is modified to delete the second sentence in the paragraph.

xv. Section 1028.2 is deleted.

10. Chapter 11 is deleted in its entirety and replaced by N.J.A.C. 5:23-7.

11. Chapter 12 of the building subcode, entitled "Interior Environment", is modified as follows:

i. Sections 1207.2 and 1207.2.1 entitled "Stairway illumination" and "Controls," respectively, are deleted in their entirety.

ii. Section 1210.1 is deleted and substitute in lieu thereof Sections 1210.1 and 1210.1.1 of the 1993 BOCA National Building Code as follows: "1210.1 Roof spaces: Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilation openings that are protected against the entrance of rain and snow. The openings shall be covered with corrosion-resistant mesh not less than 1/4 inch (6 mm) nor more the 1/2 inch (13 mm) in any direction.

1210.1.1 Ventilation Area: The minimum required net free ventilation area shall be 1/150 of the area of the space ventilated, except that the minimum required

area shall be reduced to 1/300, provided that: a vapor retarder having a permeance not exceeding 1 perm is installed on the warm side of the ceiling; or at least 50 percent, and not more than 80 percent, of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents, with the balance of the required ventilation provided by eave or cornice vents."

12. Chapter 13 entitled "Energy Conservation" is deleted in its entirety.

13. The following amendment is made to Chapter 14 of the building subcode, entitled "Exterior Wall Coverings":

i. Section 1405.3.11, entitled "Foundation Insulation" is deleted in its entirety.

14. The following amendment is made to Chapter 15 of the building subcode, entitled "Roofs and Roof Structures":

i. Section 1512.1 is amended to delete the sentence "The repair .... for new roofing."

15. The following amendments are made to Chapter 16 entitled "Structural Loads":

i. Table 1609.7(6) Note e is deleted and substitute in lieu thereof the text of Table 1611.7(6) Note e of the 1993 BOCA National Building Code as follows: "Note e. Openings are permanent openings and those that are likely to be breached during wind having the basic wind speed per Section 1609.3. Doors and windows which have been designed for wind loads in accordance with Section 1609.8 are to be considered enclosures."

ii. Section 1614.5 is amended to replace the term "Change of Occupancy" with the term "Change of Use as per N.J.A.C. 5:23-2.6";

16. The following amendments are made to Chapter 17 of the building subcode, entitled "Structural Tests and Inspections":

i. Section 1701.2 is amended to replace the term "approved rules" with the word "regulations";

ii. In Section 1702.1, the definition of the term "approved agency" is amended to add the words "by the building subcode official or other authority having jurisdiction in accordance with the regulations" after the word "approved";

iii. In Section 1702.1, the definition and the term "Inspection, special" are deleted;

iv. Section 1705.1 is amended to add the words "for Class 1 structures or when requested by the building subcode official" after the words "special inspections" on lines 1 and 2;

v. Section 1705.1.1 is deleted in its entirety and replaced with the sentence: "Permit applications shall be made in accordance with N.J.A.C. 5:23-2.15";

vi. Section 1705.2 is amended to add the sentence: "Building elements fabricated off site shall be approved in accordance with N.J.A.C. 5:23- 4.26";

vii. Section 1705.3.1 is deleted in its entirety;

viii. Section 1707.1 is amended to replace the phrase "approved rules" with the word "regulations," and to replace the phrase "Section 106.0" with the phrase "the regulations."

17. The following amendments are made to Chapter 18 entitled "Foundations and Retaining Walls."

i. Table 1812.3.2(1) and Table 1812.3.2(2) are amended as follows:

Table 1812.3.2(1)

PLAIN MASONRY AND PLAIN CONCRETE FOUNDATION WALLS supere

Plain masonry supere		Minimal nominal wall thickness (inches)		
superf Soil		classes and lateral soil load supere (pounds		
per		square foot per foot of depth) superf		
Wall	Depth of	GW, GP, SW,	GM, SM, SM-SC, ML,	GC, SC
and MH	unbalanced	and SP soils	inorganic CL and	soils
height	backfill	30	ML-CL soils 45	
60	height			
(feet)	(feet)			
superf	superf			
	4 (or less)	8	8	8
7	5	8	10	10
	6	10	12	10 (solid
superb )	7	12	10 (solid superb )	12 (solid
superb )	4 (or less)	8	8	8
	5	8	10	12
8	6	10	12	12 (solid
superb )	7	12	12 (solid superb )	Note
c	8	10 (solid	12 (solid superb )	Note
c		superb )		
	4 (or less)	8	8 8	
	5	10	10	12
	6	12	12	12 (solid
superb )	7	12	12 (solid superb )	Note
9	8	12 (solid	Note c	Note
c		superb )		
c	9	Note c	Note c	Note
c				

Plain concrete  
Minimal nominal wall thickness (inches)

superf Soil		classes and lateral soil load supere		
(pounds per		square foot per foot of depth) superf		
Wall	Depth of	GW, GP, SW, and	GM, SM, SM-SC,	GC, SC
and MH				



height soils 60 (feet) superf	unbalanced backfill height (feet) superf 4 (or less)	SP soils 30	ML, inorganic CL and ML-CL soils 45	
1/2		7 1/2	7 1/2	7
7	5	7 1/2	7 1/2	7
1/2	6	7 1/2	7 1/2	
8	7	7 1/2	8	
10	4 (or less)	7 1/2	7 1/2	7
1/2	5	7 1/2	7 1/2	7
1/2	6	7 1/2	7 1/2	
8	7	7 1/2	10	
10	8	10	10	
10	4 (or less)	7 1/2	7 1/2	7
1/2	5	7 1/2	7 1/2	7
1/2	6	7 1/2	7 1/2	
10	7	7 1/2	10	
9	8	10	12	
10	9	10	12	

Note d

Note a. For design lateral soil loads and descriptions of soil classes, see

Section 1611.0. Soil classes are in accordance with the Unified Soil Classification System and design lateral soil load are for moist soil conditions without hydrostatic pressure.

Note b. Solid grouted hollow units or solid masonry units.

Note c. An analysis in compliance with ACI 530/ASCE 5/TMS 402 or reinforcement

in accordance with Table 1812.3.2(2) is required.

Note d. An analysis in compliance with ACI 318 is required.

Note e. Mortar shall be Type M or S and masonry shall be laid in running bond.

Note f. 1 foot = 304.8 mm; 1 inch = 25.4 mm; 1 pound per square foot = 47.9 Pa.

Table 1812.3.2(2)

REINFORCED CONCRETE AND REINFORCED MASONRY FOUNDATION WALLS  
supera,b,c,d

Vertical reinforcement for 8-inch nominal  
wall  
(thickness) supere Soil classes and lateral  
soil  
load supera (pound per square foot per  
foot of

Wall and MH height soils 60 (feet)e (inches on center)	Depth of unbalanced backfill height (feet) supere	GW, GP, SW, and SP soils 30 (inches on center)	depth) supere GM, SM, SM-SC, ML, inorganic CL and ML-CL soils 45 (inches on center)	GC, SC
at 48	4 (or less)	#4 at 48	#4 at 48	#4
7 at 40	5	#4 at 48	#4 at 48	#4
at 40	6	#4 at 48	#5 at 48	#5
at 48	7	#4 at 40	#5 at 40	#6
at 48	4 (or less)	#4 at 48	#4 at 48	#4
at 48	5	#4 at 48	#4 at 48	#4
at 40	6	#4 at 48	#5 at 48	#5
8 at 40	7	#5 at 48	#6 at 48	#6
at 40	8	#5 at 40	#6 at 40	#7
at 40	4 (or less)	#4 at 48	#4 at 48	#4
at 48	5	#4 at 48	#4 at 48	#5
at 48	6	#4 at 48	#5 at 48	#6
at 48	7	#5 at 48	#6 at 48	#7
9 at 48	8	#5 at 40	#7 at 48	#8
at 48	9	#6 at 40	#8 at 48	#8
at 32				

Note a. For design lateral soil loads and descriptions of soil classes, see

Section 1611.0. Soil classes are in accordance with the Unified Soil Classification System and design lateral soil load are for moist soil conditions without hydrostatic pressure.

Note b. Provisions to this table are based on construction requirements specified in Section 1812.3.2.1.

Note c. For alternate reinforcement, see Section 1812.3.2.2.

Note d. Mortar shall be Type M or S and masonry shall be laid in running bond.

Note e. 1 foot = 304.8 mm; 1 inch = 25.4 mm; 1 pound per square foot = 47.9 Pa.

18. The following amendment is made to Chapter 26 of the building subcode, entitled "Plastic":

- i. Section 2603.5.1 is deleted in its entirety.

19. The following amendment is made to Chapter 27 of the building subcode, entitled "Electric Wiring, Equipment and Systems":

- i. Chapter 27 is deleted in its entirety.

20. The following amendments are made to Chapter 28 of the building subcode, entitled "Mechanical Systems":

- i. Section 2803.0 is deleted in its entirety;
- ii. Section 2809.0 is deleted in its entirety.

21. Chapter 29 of the building subcode, entitled "Plumbing Systems" is deleted in its entirety.

22. The following amendments are made to Chapter 30 of the building subcode, entitled "Elevators and Conveying Systems":

- i. Section 3001.1 is amended to replace the phrase "Except as otherwise provided by statute, the" in the first line with "The", to add the phrase "and where applicable, of N.J.A.C. 5:23-12" after the word "Chapter" in the second line, to delete the phrase "and amusement devices" in the second sentence and to replace the term "code official" with the term "construction official" in the second sentence;

- ii. 3007.1.1.1 Elevator car to accommodate ambulance stretcher. In addition to the requirements of 403.8, if applicable, an elevator installed in a newly-constructed multiple-family dwelling shall be of such a size and arrangement as to

accommodate a 24-inch by 76-inch (610 mm by 1,930 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame. At least one elevator accessing each residential floor shall be of such size and arrangement and be so identified.

iii. Section 3001.2 is amended to substitute the term "this code" for "these rules", to add the phrase "with the exception of Rule 1206.1h" after "ASME A17.1", and to add the following sentence at the end of the first paragraph: "However any education, experience or training requirements included or cited in reference standards shall not be binding in this State.";

iv. Section 3002.1, "Hoisting and elevating equipment, miscellaneous," is amended to delete "inclined elevators" in the fourth line;

v. Section 3003.0 is deleted in its entirety except section 3003.3;

vi. Section 3004.1 is amended to delete the words "and maintenance" and substitute in lieu thereof "inspection and," and to delete the words "and periodic inspections";

vii. Section 3004.2 is amended to add the words "and inspections" after the word "tests" in the title and after the words "All such tests" in the seventh line; to delete the words "this chapter" in the first sentence and "this code" in the second sentence and substitute in lieu thereof "these rules"; and to replace the term "code official" with the term "appropriate subcode official";

viii. Sections 3004.3 and 3004.4 are deleted in their entirety;

- ix. Section 3004.5.2 is amended to delete the words "and amusement devices";
  - x. Section 3004.5.4 is amended to replace the term "code official" with the term "construction official";
  - xi. Section 3005.0 is deleted in its entirety with the exception of section 3005.4, which is amended to replace the term "code official" with the term "construction official";
  - xii. Section 3006.2 is amended to add in the fifth line after the words "rescue purposes," the phrase "and all elevators installed as part of an accessible route or approved to serve as an accessible means of egress";
  - xiii. Section 3009.0 is amended to delete the words "Signals and" after the word "Emergency" in the title;
  - xiv. Section 3010.2.2 is amended to replace the term "code official" with the term "fire protection subcode official";
  - xv. Section 3012.2 is deleted;
  - xvi. Section 3012.4 is amended to replace the term "code official" with the term "construction official";
  - xvii. Section 3012.5 is amended to replace the term "code official" with the term "construction official";
  - xviii. Section 3013.0 is deleted in its entirety.
23. The following amendments are made to Chapter 31 of the building subcode, entitled "Special Construction":
- i. Section 3102.5 is deleted in its entirety.

ii. Section 3104.1.1 is deleted in its entirety and replaced by the following language:

(1) Temporary structures: A construction permit is required for the erection, operation or maintenance of all temporary structures (excluding tents and tensioned membrane structures) covering an area in excess of 120 square feet, including all connecting areas or spaces with a common means of egress or entrance, or which are used or intended to be used for gatherings of 10 or more persons;

(2) Tents with appurtenances: A construction permit is required for the erection, operation or maintenance of all tents or tensioned membrane structures of any size if they contain appurtenances such as platforms or electrical equipment;

(3) Tents without appurtenances: No permit is required for the erection, operation or maintenance of any tent or tensioned membrane structure without appurtenances if the tent or structure is no more than 900 square feet in area and no more than 30 feet in any dimension (excluding canopies), whether it is one unit or composed of multiple units. Tents used exclusively for recreational camping purposes shall be exempt from the above requirements.

(4) A temporary greenhouse, also called a "hoophouse" or "polyhouse," used exclusively for the production or storage of live plants, shall be exempt from the permit requirements of the Uniform Construction Code if it meets the following criteria:

(A) There is no permanent anchoring system or foundation;

(B) There is no storage, temporary or otherwise, of solvents, fertilizers, gases, or other chemical or flammable materials;

(C) The structure is no wider than 31 feet and there is an

unobstructed path of no greater length than 150 feet from any point to a door or fully accessible wall area; and

(D) The covering of the structure is of a material no greater than six mils (152.4 micrometers) in thickness, conforming to N.F.P.A. 701 standard, that yields approximately four pounds of maximum impact resistance to provide egress through the wall.

(5) The provisions of (b) 22ii(4) above notwithstanding, if a temporary greenhouse contains any device subject to the electrical subcode or any mechanical equipment subject to the mechanical subcode, then a permit shall be required for the device, system or fixture only. If the temporary greenhouse is connected to a potable water system, a permit shall be required for the backflow prevention devices only;

iii. Section 3104.6 is amended to replace the term "code official" with the term "construction official";

iv. Section 3106.5 is amended to replace the term "authorities" with "authorities having jurisdiction";

v. Section 3107.8 is amended to replace the term "Mobile units" with the term "Manufactured Homes;"

vi. Section 3107.10 is amended as follows: The text from the phrase "sections 118.0" to the end is deleted and replaced with the following language: "N.J.A.C. 5:23-2.4";

vii. Section 3107.11 is amended to replace the term "Section 3403.0" with the term "N.J.A.C. 5:23-2.5":

viii. Section 3108.5 is amended to add the phrase "to comply with the requirements of the electrical subcode" after the word "grounded."

24. The following amendments are made to Chapter 32 of the building subcode, entitled "Construction in the Public Right of Way":

i. Section 3202.5 is deleted in its entirety.

ii. Section 3204.2 is deleted.

iii. Section 3205.1 is amended to replace the term "code official" on line 1 with the term "construction official".

25. The following amendments are made to Chapter 33 of the building subcode entitled "Site Work, Demolition and Construction":

i. Section 3302.1 is amended to replace the term "code official" on line 3 with the term "construction official";

ii. Section 3309.2 is amended to delete the words "and the construction and extension of soil and vent stacks and the location of window openings shall comply with the provisions of section 2908.3" and replace them with the following language:

(1) "When a new building is erected higher than an existing building, windows or other wall openings shall not be located nearer than 10 feet to an existing soil or vent stack on the lower building unless the owner of the new building makes the necessary provision to extend such soil or vent stacks to a height of not less than two feet above the topmost opening at his own expense and with the approval of the adjoining owner."

(2) "When the existing adjoining building is of greater height than the new building, the owner of the structure of greater height may, with consent of the



owner of the new structure, extend all new soil, waste or vent stacks which are located within 20 feet of the common lot line to a level above the higher existing roof";

iii. Section 3310.0 is deleted in its entirety and replaced by N.J.A.C. 5:23-2.17.

iv. Section 3315.0 is amended to replace the words "Sections 1024.0 and 2702.2, item 5" with "Section 1024.0 and provide a level of illumination equivalent to at least 3 foot candles (32 lux);"

26. Chapter 34 entitled "Existing Structures" is deleted in its entirety.

27. The following amendments are made to Chapter 35 of the building subcode entitled "Referenced Standards":

i. Under the subheading "ASME", standard "A17.1-93", add "and A17.1b-95 Addendum" after "A17.1a-94 Addendum;"

ii. Under the subheading "Codes" delete the following titles:

(1) BOCA National Property Maintenance Code;

(2) ICC International Mechanical Code;

(3) ICC International Plumbing Code--with 1996 Supplement;

(4) ICC International Private Sewage Disposal Code--with 1996

Supplement;

(5) CABO Model Energy Code.]

**1. Chapter 1, Administration, shall be deleted in its entirety. In addition, any referenced section of Chapter 1 shall be deleted throughout the code and “the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23)” shall be inserted.**

**2. Chapter 2, Definitions, shall be amended as follows:**

**i. The definition of “addition,” shall be deleted.**

**ii. In the definition of agricultural buildings, “A structure qualifying under the Uniform Construction Code definition of a Commercial Farm Building may be built according to the regulations at N.J.A.C. 5:23-3.2(d)” shall be inserted after the last sentence.**

**iii. The definition of “alteration” shall be deleted.**

**iv. The definition of “building” shall be deleted and the following shall be inserted: “BUILDING. A structure enclosed with exterior walls or fire walls, built, erected and framed of component structural parts, designed for the housing shelter, enclosure and support of individuals, animals or property of any kind. When used herein, building and structure shall be interchangeable except where the context clearly indicates otherwise.”**

**v. The definition of “building line” shall be deleted.**

**vi. The definition of “building official” shall be deleted and the following shall be inserted: “BUILDING SUBCODE OFFICIAL. A qualified person appointed by the municipal appointing authority or the commissioner pursuant to the act and the regulations to enforce the provisions of the building subcode within the jurisdiction of the enforcing agency.”**

**vii. The definitions of “existing structure” “historic building,” and “jurisdiction” shall be deleted.**

**viii. The definition of “owner” shall be deleted and the following shall be inserted: “OWNER. The owner or owners in fee of the property of a lesser estate**

therein, a mortgagee or vendee in possession, an assignee of rents, receiver, executor, trustee, lessee or any other person, firm or corporation, directly or indirectly in control of a building, structure or real property and shall include any subdivision thereof of the State.”

ix. The definitions of “permit,” “person,” and “repair” shall be deleted.

x. The definition of “structure” shall be deleted and the following shall be inserted: “STRUCTURE. A combination of materials to form a construction for occupancy, use, or ornamentation, whether installed on, above, or below the surface of a parcel of land; provided the word “structure” shall be construed when used herein as though followed by the phrase “or part or parts thereof and all equipment therein” unless the context clearly requires a different meaning.

3. Chapter 3, Use and Occupancy Classification, shall be amended as follows:

i. In Section 302.3.3, Separated uses, the first sentence of Exception 2 shall be deleted and the following shall be inserted: “A private garage located beneath a room(s) shall have walls, partitions, floors, and ceilings separating the garage from the adjacent interior spaces constructed with not less than a 1-hour fire resistance rating. Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by a means or ½-inch gypsum board or equivalent applied to the garage side.”

ii. In Table 302.3.3, Required Separation of Occupancies (Hours)<sup>a</sup>, Use Group U shall be deleted.

iii. Section 308.2, Group I-1, shall be amended as follows: In the first sentence, “16” shall be deleted and “5” shall be inserted. In the second sentence, “responding to” shall be deleted and “slow evacuation as defined in Section 22-1.3 of NFPA 101-97, referenced in Chapter 35, in” shall be inserted. In the third sentence, “residential board and care facilities, assisted living facilities” shall be deleted and “boarding houses” shall be inserted. In the same sentence, “abuse” shall be inserted after “drug.” Also, “A facility such as above, housing at least six and not more than 16 persons shall be classified as a Group R-4” shall be deleted and the following definition of “boarding house” shall be inserted:

“Boarding House: A building arranged or used for single occupancy where meals or personal or financial services are provided to the residents.”

iv. In Section 308.3, Group I-2, “who are not capable of self-preservation” shall be deleted and “where evacuation is impractical as defined in Section 22-1.3 of NFPA 101-97, referenced in Chapter 35” shall be inserted. In the second sentence, a comma shall be inserted after “to” and “assisted living facilities” shall be inserted before “mental hospitals.”

v. In Section 308.5, Group I-4, in the second sentence, “with” shall be deleted and “accessory to a dwelling unit and having” shall be inserted.

vi. In Section 308.5.1, Adult Care Facility, “accommodations for less than 24 hours for more than five unrelated adults and provides” shall be deleted, “services” shall be deleted after “care,” and the following shall be inserted: “on less than a 24-hour basis where evacuation is slow or impractical as defined in Section

22-1.3 of NFPA 101-97, referenced in Chapter 35, shall be classified as Group I-4.

Where evacuation is prompt, the facility shall be classified as Group A-3.”

vii. Section 308.5.2, Child Care Facility, shall be deleted and the following shall be inserted: “A facility that provides supervision and personal care on less than a 24-hour basis for children 2 1/2 years of age or less shall be classified as Group I-4.” In the same section, the exception shall be deleted.

viii. Section 310, Residential Group R, shall be deleted and the following definitions shall be inserted:

“(1) R-1 Residential occupancies where the occupants are primarily transient (less than 30 days) including:

Hotels (including motels) having transient occupancy

Rooming houses, with more than five residents, having transient occupancy

(2) R-2 Residential occupancies containing more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Convents

Dormitories

Fraternity and sorority houses

Monasteries

Rooming houses with more than five residents, not having transient occupancy

Therapeutic residences with more than 16 residents

(3) R-3 Detached one-and two-family dwellings greater than three stories in height, multiple single-family townhouses greater than three stories in height, and attached two-family dwellings separated from adjacent units by firewalls, including:

Single residential occupancies, accessory to a dwelling unit, having no more than five roomers or lodgers (Single occupancies, accessory to a dwelling unit, having more than five roomers or lodgers shall be classified as Group R-2 or I-1, as appropriate.)

Adult and child day care facilities, accessory to a dwelling unit, serving five or fewer persons of any age for less than 24 hours.

Rooming houses with five or fewer residents

Therapeutic residences with five or fewer residents

(4) R-4 Therapeutic residences including more than five but not more than 16 occupants, excluding staff, capable of prompt evacuation as defined by Section 22-1.3 of NFPA 101-97, referenced in Chapter 35.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided in the code.

(5) R-5 Detached one- and two-family dwellings not more than three stories in height and multiple single-family townhouses not more than three stories in height designed and constructed in accordance with the International Residential Code.”

4. Section 310.2, Definitions, shall be amended as follows:

- i. The definition of “Boarding House” shall be deleted in its entirety.
- ii. In the first sentence of the definition of “Dwelling Unit,” “living as a single housekeeping unit” shall be inserted after “persons” and before “including.”
- iii. The definition of “Personal Care Service” shall be deleted in its entirety.
- iv. The definition of “Residential Care/Assisted Living Facilities” shall be deleted in its entirety.
- v. The definition of “Rooming House” shall be inserted as follows:  
“Rooming House: A building arranged or used for single occupancy where no meals or personal or financial services are provided to the residents.”
- vi. The definition of “Single Residential Occupancy” shall be inserted as follows: “Single Residential Occupancy: A building arranged or used for individual residency by persons living independently of one another, regardless of whether the residents share the use of common facilities, such as kitchen or bathing facilities.”
- vii. The definition of “Therapeutic Residence” shall be inserted as follows: “Therapeutic Residence: A residence for adults, each of whom is capable of prompt evacuation as defined by Section 22-1.3 of NFPA 101-97, referenced in Chapter 35, and who live within a single dwelling unit for therapeutic purposes, without a resident landlord or operator, but with some government or private social service provider oversight.”

viii. The definition of “Transient Occupancy” shall be inserted as follows: “Transient Occupancy: A residential occupancy where no more than fifteen percent of the residents occupy the residency for more than 90 days.”

5. Chapter 4, Special Detailed Requirements Based on Use and Occupancy, shall be amended as follows:

i. In Section 402.4.2, Number of Means of Egress, “used by persons other than employees” shall be deleted.

6. Chapter 5, General Building Heights and Areas, shall be amended as follows:”

i. In Table 503, Allowable Heights and Building Areas, the maximum allowable area for Group A-5, construction Types IIIB, IV, and VB shall be deleted. In addition, Use Group U shall be deleted.

ii. Section 507.1, Unsprinklered, one story, shall be deleted in its entirety.

iii. Section 507.3, Two -story, shall be amended as follows: In the first sentence, “building of Type I or Type II construction under Use” shall be inserted after “two-story.”

7. Chapter 6, Types of Construction, shall be amended as follows:

i. In Table 602, Fire Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance<sup>a</sup>, “U” shall be deleted from the heading of the fifth column. In addition, in the same table, at Note b, “and Group U when used as an accessory to Group R3” shall be deleted.

ii. In Section 602.3, Type III, the last sentence shall be deleted.



**8. Chapter 7, Fire-Resistance-Rated Construction, shall be amended as follows:**

**i. In Table 705.4, Fire Wall Fire Resistance Ratings, under the heading “Group,” “U” shall be deleted.**

**ii. Section 705.5, Horizontal continuity, shall be deleted in its entirety.**

**Section 707.6 of the 1996 BOCA National Building Code shall be inserted as follows:**

**“Horizontal Continuity. Firewalls shall be made smoke tight at the junction of exterior walls. In exterior wall construction employing studs, the wall shall extend through the stud space to the exterior sheathing.”**

**iii. Section 707.14.1, Elevator lobby, shall be amended as follows: In the first sentence, “In buildings having occupied floors greater than 75 feet above the lowest level of fire department vehicle access” shall be inserted before “elevators.” In the same section, Exception 4 shall be deleted in its entirety.**

**9. Chapter 9, Fire Protection Systems, shall be amended as follows:**

**i. In Section 903.2.5, Group I, the exception shall be deleted and the following shall be inserted: “Exceptions**

**1. For other than buildings of construction Types IIIB and VB, an automatic fire sprinkler system installed in accordance with Section 903.3.1.2. shall be allowed in Group I-1 facilities.**

**2. An automatic fire sprinkler system shall not be required for Group I-4 child care facilities that are located at the level of exit discharge and that accommodate 100 or fewer children and in which each child care room has an exit door directly to the exterior.”**

ii. Section 903.2.8, Group R-2, shall be deleted in its entirety. Section 904.9 of the 1996 BOCA National Building Code shall be inserted as follows:

“Group R-2: An automatic fire sprinkler system shall be provided throughout all buildings with an occupancy in Group R-2 in accordance with Section 903.3.1.1 or 903.3.1.2:

Exception: Buildings that do not exceed two stories including basements, which are not considered a story above grade, and with a maximum of 12 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve the dwelling unit.”

iii. In Section 903.2.9, Group R-4, the reference to “Section 903.3.1.3” shall be deleted.

iv. Section 903.2.12.1, Stories and basements without openings, shall be deleted in its entirety and Section 904.10 of the 1996 BOCA National Building Code shall be inserted as follows: “Windowless story: An automatic fire sprinkler system shall be provided throughout every story or basement of all buildings where there is not provided at least one of the following types of openings:

1. An exterior stairway that conforms to the requirements of Section 1005.3.6, or an outside ramp that conforms to the requirements of Section 1003.3.4, leading directly to grade in each 50 linear feet (15240 mm) or fraction thereof of exterior wall in the story or basement, on at least one side of the building.

2. Openings entirely above the adjoining ground level totaling 20 square feet (1.9 m<sup>2</sup>) in each 50 linear feet (15240 mm) or fraction thereof of exterior

wall in the story or basement, on at least one side of the building. Openings shall have a least dimension of not less than 22 inches (559 mm), and shall have a minimum net clear opening of 5 square feet (0.5 m<sup>2</sup>). Access to such openings from the exterior shall be provided to the fire department and such openings shall be unobstructed to allow fire fighting and rescue operations from the exterior.

Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22860 mm) from such openings, the story shall be equipped throughout with an automatic fire sprinkler system or openings as specified herein shall be provided on at least two sides of the exterior walls of the story. If any portion of a basement is located more than 75 feet (22860 mm) from the openings required in this section, the basement shall be equipped throughout with an automatic sprinkler system.

Exception: Occupancies in Group R-3.”

v. New Section 903.2.16, Automatic sprinkler system thresholds, shall be inserted as follows: “An automatic sprinkler system shall be required in accordance with Section 903.3.1.1 when the maximum area is exceeded for the following construction types of Groups B, F-2, and S-2 according to table 903.2.16, Automatic Sprinkler System Thresholds. All others not listed shall follow the applicable requirements as set forth in the IBC/2000.”

**“Automatic Sprinkler System Thresholds**

<b>Group B</b>	<b>IIB</b>	<b>IIIB</b>	<b>VB</b>
<b>Story</b>	<b>Max. Area</b>	<b>Max. Area</b>	<b>Max. Area</b>
<b>1</b>	<b>36,000</b>	<b>*</b>	<b>*</b>
<b>2</b>	<b>72,000</b>	<b>*</b>	<b>*</b>
<b>3</b>	<b>99,360</b>	<b>99,360</b>	<b>*</b>

<b>Group F-2</b>	<b>IIB</b>	<b>IIIB</b>	<b>VB</b>
<b>Story</b>	<b>Max. Area</b>	<b>Max. Area</b>	<b>Max. Area</b>
<b>1</b>	<b>36,000</b>	<b>*</b>	<b>18,000</b>
<b>2</b>	<b>72,000</b>	<b>*</b>	<b>36,000</b>
<b>3</b>	<b>99,360</b>	<b>*</b>	<b>*</b>

<b>Group S-2</b>	<b>IIB</b>	<b>IIIB</b>	<b>VB</b>
<b>Story</b>	<b>Max. Area</b>	<b>Max. Area</b>	<b>Max. Area</b>
<b>1</b>	<b>36,000</b>	<b>36,000</b>	<b>18,000</b>
<b>2</b>	<b>72,000</b>	<b>72,000</b>	<b>36,000</b>
<b>3</b>	<b>99,360</b>	<b>99,360</b>	<b>*</b>

**\* Requirements as set forth in the IBC/2000”**

**vi. Section 903.3.2, Quick response and residential sprinklers, shall be deleted in its entirety.**

**vii. In Section 905.2, Installation standards, Sections 915.4, 915.5, and 915.6 of the 1996 BOCA National Building Code shall be inserted as follows:**  
**“905.2.1 Piping design. The riser piping, supply piping and the water service piping shall be sized to maintain a residual pressure of at least 65 psi (448 kPa) at the topmost outlet of each riser while flowing the minimum quantities of water specified**

in Sections 905.2.1.1 and 905.2.1.2. The pipe size shall be based on the capacity of the automatic water supply system or, where an automatic water supply is neither required nor provided to maintain the residual pressure of 65 psi (448 kPa), the pipe size shall be based on a pressure of 150 psi (1034 kPa) available at the fire department connection.

Exception: The residual pressure of 65 psi (448 kPa) is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and where the highest floor level is not more than 150 feet (45720 mm) above the lowest level of fire department vehicle access.

905.2.1.1 Riser sizing: The riser size shall be based on hydraulic calculations for a minimum flow of 500 gallons per minute (gpm) (1892 L/min.).

Exceptions:

1. Where only 1½-inch valves are provided, the riser(s) shall be sized to provide a minimum flow of 100 gpm (378 L/min.).

2. In buildings where limited area sprinkler systems are supplied with water from a common standpipe riser, the riser shall be sized to satisfy total demand.

3. For occupancies in Group B, I, R-1 or R-2 in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 906.2.1, each riser shall be sized for a minimum flow of 250 gpm (945 L/min.).

4. Risers that are sized in accordance with the pipe schedule requirements of NFPA 14 listed in Chapter 35 are not subject to this requirement.

905.2.1.2 System pipe sizing: The system piping, including the horizontal or common feeder lines shall be sized for a minimum flow of 500 gpm (1892 L/min.). Where more than one standpipe riser is required or provided, all common system piping shall be sized for a minimum flow of 500 gpm (1892 L/min.) for the first riser plus 250 gpm (945 L/min.) for each additional riser, and the total shall not be required to exceed 1,250 gpm (4731 L/min.).

Exceptions

1. Where only 1½-inch valves are provided, the supply piping shall be sized for a minimum flow of 100 gpm (378 L/min.) for each riser, and the total shall not be required to exceed 500 gpm (1892 L/min.).

2. In buildings where limited area sprinkler systems are supplied with water from a common standpipe riser, the supply piping shall be sized for a minimum flow of 500 gpm (1892 L/min.) plus the sprinkler demand for the first riser, plus 250 gpm (945 L/min.) for each additional riser, and the total shall not be required to exceed 1,250 gpm (4731 L/min.).

3. For occupancies in Group B, I, R-1 or R-2 in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, all common supply piping shall be sized for a minimum flow of 250 gpm (945 L/min.) for the first riser plus 250 gpm (945 L/min.) for each additional riser, and the total shall not be required to exceed 750 gpm (2838 L/min.).

905.2.2 Water supply: A water supply for fire department equipment shall be available to the building site. The water supply shall be capable of a minimum flow as required by Section 905.2.1.2 for a duration of 30 minutes.

905.2.2.1 Automatic water supply: An automatic water supply is required for all standpipe systems. The automatic water supply and supply piping shall be capable of delivering a flow of 500 gpm (1892 L/min.) at the residual pressure specified in Section 905.2.1 for a duration of 30 minutes.

Exceptions

1. In buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 where the highest floor is located not more than 150 feet (45720 mm) above the lowest level of fire department vehicle access, the automatic water supply is not required to exceed the requirements of NFPA 13 listed in Chapter 35.

2. Dry standpipe systems installed in open parking structures.

905.2.2.2 Interconnection: The required water supply shall be connected to the base of each standpipe riser. Where more than one standpipe riser is required, all risers shall be interconnected with a common supply line. An approved indicating valve shall be installed to permit individual risers to be taken out of service.”

905.2.3 Control valves: Where a standpipe system riser also serves as the automatic sprinkler system riser in building required to have both systems or in buildings having both systems, sprinkler control valves shall be installed at each floor level at the connection to the riser.

viii. In Section 905.4, Location of class I standpipe hose connections, Items 1 and 2 shall be deleted in their entirety. Section 915.7 of the 1996 BOCA National Building Code shall be inserted as follows: “A standpipe hose connection

shall be located at each floor level at every exit stairway, and on each side of the wall adjacent to the exit opening of a horizontal exit.

Exceptions

1. Where the floor area adjacent to a horizontal exit stairway outlets by a 30-foot (9144mm) hose stream from a nozzle attached to 100 feet (30,480mm) of hose, a hose connection shall not be required at the horizontal exit.

2. Standpipe hose connections for systems required by Section 905.3.2. shall be permitted to be located only at exits such that all portions of the building floor area are not more than 200 feet (60,960mm) from a hose connection or 200 feet (122m) from the nearest point of fire department vehicle access.”

ix. Section 905.4.2, Interconnection, shall be deleted in its entirety and Section 915.7.1 of the 1996 BOCA National Building Code shall be inserted as follows “905.4.2 Location: At each floor level and not more than 5 feet (1524mm) above the floor, there shall be connected to each standpipe a 2 ½ inch hose connection with valves and threads compatible with the connections used by the local fire department.”

x. Section 906.0, Portable Fire Extinguishers, shall be deleted in its entirety and new Section 906.0, entitled “Fire Department Connections,” from Section 916.0 of the 1996 BOCA National Building Code shall be inserted as follows: “906.1 Required: All required water fire-extinguishing and standpipe systems shall be provided with a fire department connection in accordance with the applicable standards. Standpipes in buildings under construction or demolition shall conform to Section 3311.



### Exceptions

1. Limited area sprinkler systems applied from the domestic water system.

2. Where the local fire department approves a single connection for a large diameter hose of at least 4 inches (102mm).

3. An automatic sprinkler system with less than 20 sprinklers

906.2 Connections: Fire department connections shall be arranged in such a manner that the attachment to any one sprinkler connection will serve all sprinklers, and the attachment to any one standpipe connection will serve all standpipes within the building.

906.3 Location: Fire department connections shall be located and shall be visible on a street front or on a location approved by the fire department. Such connections shall be located so that immediate access is provided to the fire department. Fire department connections shall not be obstructed by fences, bushes trees, walls, or any other similar object.

906.4 Height: Fire department connections shall not be less than 18 inches (457mm) and more than 42 inches (1067mm) in elevation, measured from the ground level to the centerline of the inlets.

906.5 Projection: Where the fire department connection will otherwise project beyond the property line or into the public way, a flush-type fire department connection shall be provided.

906.6 Hose thread: Hose thread in the fire department connection shall be uniform with that used by the local fire department.

906.7 Fittings: Fire department inlet connection shall be fitted with check valves, ball drip valves and plugs with chains or frangible clips.

906.8 Signs: A metal sign with raised letters at least 1 inch (25mm) in height shall be mounted on all fire department connections serving sprinklers or standpipes. Such signs shall read “Automatic Sprinklers” or “Standpipes,” or both, as applicable”

xi. Section 907.2.10.1.4, Additions, alterations, or repairs to Group R, shall be deleted in its entirety.

xii. In Section 907.2.10.3, Interconnection, Exception 2 shall be deleted in its entirety.

xiii. In Section 909.18.8.3, Reports, “The report shall be reviewed by the registered design professional and, when satisfied that the design intent has been achieved, the responsible registered design professional shall seal, sign, and date the report” shall be deleted.

10. Chapter 10, Means of Egress, shall be amended as follows:

i. In Section 1003.3.1.3.5, Security grilles, “In Groups B, F, M, and S” shall be deleted and “horizontal” shall be capitalized.

ii. Section 1003.3.1.8, Locks and latches, shall be amended as follows:  
In Exception 2, “Group A having an occupant load of 300 or less” shall be deleted.  
In the same section, Exception 5 shall be inserted as follows: “5. Key operation shall be permitted from a dwelling unit provided that the key cannot be removed from the lock when the door is locked from the side from which egress is made.”

iii. In Section 1003.3.1.8.2, Delayed egress locks, “E” shall be deleted.

iv. In Section 1004.2.2.1, Two exit or exit access doorways, the last sentence of Exception 1 shall be deleted.

v. Section 1004.2.3, Egress through intervening spaces, shall be deleted in its entirety. Section 1006.2.1 of the 1996 BOCA National Building Code shall be inserted as follows: “Egress through adjoining spaces: Egress from a room or a space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas are accessory to the area served; are not a high-hazard occupancy; and provide a discernable path of travel to an exit. A maximum of one exit access shall be permitted to pass through a kitchen, storeroom, restroom, closet or similar space provided that a passage through such space is not the only means of access to an exit. An exit access shall not pass through a room subject to locking. Means of egress from dwelling units or sleeping areas shall not lead through other dwelling units or sleeping areas and shall not lead through toilet rooms or bathrooms.”

vi. In Section 1004.3.2, Corridors, “and passageways” shall be inserted after “corridors.”

vii. In Table 1004.3.2.1, Corridor Fire Resistance Rating, under the heading “Occupancy,” “U” shall be deleted from the third row.

viii. In Section 1004.3.2.2, Corridor width, “passageway” shall be inserted after “corridor.”

ix. Section 1004.3.2.3, Dead ends, shall be amended as follows: In the first sentence “and passageways” shall be inserted after “corridors.” In Exception 1, “or passageway” shall be inserted after “corridor.” In Exception 2, “and

passageways” shall be inserted after “corridors.” In Exception 3, “or passageway” shall be inserted after each “corridor.”

x. In Table 1005.2.2, Buildings with One Exit, under the heading “Occupancy,” “U” shall be deleted from the first row.

xi. In Section 1005.3.2, Vertical exit enclosures, Exception 1 shall be deleted and the following shall be inserted: “1. In other than Group H and I occupancies, a stairway connecting not more than two floor levels, one of which is the level of exit discharge, which serves an occupant load of not more than 10 or serves 4 or fewer dwelling units is not required to be enclosed.” In the same section, Exception 8 shall be deleted.

xii. Section 1005.3.5, Horizontal exits, shall be deleted in its entirety. Section 1019.0 of the 1996 BOCA National Building Code shall be inserted as follows: “Horizontal Exits

1005.3.5 General: Horizontal exits shall be accepted as an approved exit element of a required means of egress. The connection between an area of a building that the horizontal exit serves and the area of refuge as herein required shall be accomplished by protected openings in a fire-resistance rated wall, or by an open-air balcony or bridge.

1005.3.5.1 Separation: The separation between buildings or areas of refuge connected by a horizontal exit shall be provided by at least a 2-hour fire-resistance rated firewall or fire separation assembly with approved opening protectives complying with Chapter 7 and Table 602.

1005.3.5.2 Doors: All doors shall swing in the direction of egress travel. Where the horizontal exit serves as an exit from both sides of the wall, there shall be adjacent openings with swinging fire doors opening in opposite directions.

Exception: Horizontal sliding doors complying with Section 1003.3.1.3.3.

1005.3.5.3 Area of refuge: The discharge area of a horizontal exit shall be either public areas or spaces occupied by the same tenant, and each such area of refuge shall be adequate to hold the total occupant load of both connected areas. The capacity of areas of refuge shall be computed on a minimum net floor area allowance for each occupant to be accommodated therein, not including areas of stairways, elevators and other shafts or courts, as follows:

1. 30 square feet (3 m<sup>2</sup>) per patient for hospitals and nursing homes.

2. 6 square feet (0.56 m<sup>2</sup>) per occupant on stories not housing patients confined to a bed or litter in an occupancy in Group I-2.

3. 6 square feet (0.56 m<sup>2</sup>) per occupant in an occupancy in Group I-3.

4. 3 square feet (0.28 m<sup>2</sup>) in all other cases.

1005.3.5.4 Egress from area of refuge: The path of egress travel from the horizontal exit through the area of refuge to another exit shall be continuously available. In other than occupancies in Group I-3, there shall be at least one exit on each side of the horizontal exit, which is not a horizontal exit. Any area of refuge not having access to an exit, other than a horizontal exit, shall be considered as part of

an adjoining area of refuge with such exit. In the area(s) served by the horizontal exit, the length of exit access travel distance to the horizontal exit or another exit shall not exceed the requirements of Section 1004.2.4.”

xiii. Section 1009.1, General, shall be amended as follows: In the second sentence, “Basements and” shall be deleted and “sleeping” shall be capitalized.

11. Chapter 11, Accessibility, shall be deleted in its entirety.

12. Chapter 13, Energy Efficiency, shall be deleted in its entirety.

13. Chapter 15, Roof Assemblies and Rooftop Structures, shall be amended as follows:

i. In Table 1505.1, Minimum Roof Covering Classification for Types of Construction, at Note b, “and U occupancies” shall be deleted from the first sentence.

14. Chapter 16, Structural Design, shall be amended as follows:

i. Section 1603.3, Live loads posted, shall be deleted in its entirety.

ii. Section 1603.4, Occupancy permits for changed loads, shall be deleted in its entirety.

iii. In Table 1607.1, Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads, at Note g, “building official” shall be deleted and “design professional” shall be inserted.

iv. Section 1607.9, Reduction in live loads, shall be amended as follows: In the first sentence, “and applied” shall be inserted after “reduced.” After

the first sentence, “The method chosen shall be applied throughout the building.” shall be inserted.

v. In Section 1607.9.1.3, Special occupancies, “or educational occupancies” shall be inserted after “public assembly occupancies.”

vi. In Section 1607.9.2, Alternate floor live load reduction, Item 1, “or Group E” shall be inserted after “Group A.”

vii. Section 1614.1.1, Addition to existing building, shall be deleted in its entirety.

viii. Section 1614.2, Change of Occupancy, shall be deleted in its entirety.

ix. Section 1614.3, Alterations, shall be deleted in its entirety.

x. In Section 1621.1.7, Component anchorage #1, Item 1 shall be deleted in its entirety.

xi. In Section 1621.3.14, Elevator design requirements, at the end of the section, the following shall be inserted: “The scope of Part XXIV of ASME A17.1, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater,” is deleted.”

xii. In Table 1622.2.5(2), Importance Factor (*I*) and Seismic Use Group Classification for Nonbuilding Structures, at Notes H-II and H-III, “authority having jurisdiction” shall be deleted and “construction official” shall be inserted.

15. Chapter 17, Structural Tests and Special Inspections, shall be amended as follows:

i. In Section 1701.1, Scope, “shall apply to Class I buildings and” shall be inserted after “chapter.”

ii. Section 1702.1, General, shall be amended as follows: In the title, “/Special Inspector” shall be inserted after “Agency.” In the first sentence, “or design professional acting as the approved agency” shall be inserted after “agency.”

iii. Section 1703.1, Approved agency, shall be amended as follows: In the first sentence, “Upon the request of the construction official” shall be inserted before “An.” In the same sentence, “building official” shall be deleted and “construction official” shall be inserted and “applicable” shall be deleted and “following” shall be inserted.

iv. In Section 1703.7, Evaluation and follow-up inspection, “in accordance with N.J.A.C. 5:23-4.26” shall be inserted after the second “assembly.”

v. Section 1704.1, General, shall be amended as follows: In the first sentence, “of Class 1 buildings only” shall be inserted after “construction.” In the second sentence, “the registered design professional” shall be deleted and “person” shall be inserted.

vi. Section 1704.1.2, Report requirement, shall be amended as follows: In the second sentence, “building official” shall be deleted and “construction official” shall be inserted and “registered design professional” shall be deleted and “person” shall be inserted. In the same sentence, “in accordance with N.J.A.C 5:23-2.21(c)” shall be inserted after “charge.”

vii. In Section 1704.3, Steel construction, “the on-site erection of” shall be inserted after “for.”



viii. In Table 1704.3, Required Verification and Inspection of Steel Construction, Items 1, 3, and 4 shall be deleted.

ix. In Section 1704.5, Masonry construction, “in Seismic Design Category D” shall be inserted after the second “construction.” In the same section, in Exception 2, the reference to “Table 1805.5(1)” shall be deleted.

x. Section 1704.6, Wood construction, shall be deleted in its entirety.

xi. Section 1704.9, Pier foundations, shall be deleted in its entirety.

xii. In Section 1705.1, Scope, “for Seismic Design Category D buildings” shall be inserted after “provided.”

xiii. Section 1706, Quality Assurance for Wind Regulations, shall be deleted in its entirety.

xiv. Sections 1708.1, Masonry, 1708.1.1, Empirically designed masonry and glass unit masonry in nonessential facilities, 1708.1.2, Empirically designed masonry and glass unit masonry in essential facilities, 1708.1.3, Engineered masonry in nonessential facilities, 1708.1.4, Engineered masonry in essential facilities, 1708.3, Reinforcing and pre-stressing steel, 1708.4, Structural tests, and 1708.5, Mechanical and electrical equipment, shall be deleted in their entirety.

xv. Section 1709, Structural Observations, shall be deleted in its entirety.

16. Chapter 18, Soils and Foundations, shall be amended as follows:

i. In the title of Section 1802.2.6, “Seismic Design Category C” shall be deleted and “Seismic Design Category D” shall be inserted. In the first sentence, the

reference to “Seismic Design Category C” shall be deleted and “Seismic Design Category D” shall be inserted.

ii. New Section 1802.2.8 from Section 1802.1 of the 1996 BOCA National Building Code shall be inserted as follows: “Building Height: For all buildings that are more than three stories or 40 feet (12192mm) in height, the building official shall request soil tests.”

iii. Section 1802.4.1, Exploratory boring, shall be amended as follows:  
After the first sentence, the following sentence from Section 1802.1 of the 1996 BOCA National Building Code shall be inserted: “There shall be at least one exploratory boring to rock or to an adequate depth below the load-bearing strata for every 2,500 square feet (232.5 mm) of built-over area, and such additional tests as the code official requires.”

iv. In Section 1802.6, Reports, “soil borings are required” shall be inserted after “Where.”

v. In Section 1805.2.1, Frost protection, “400 square feet (37 m<sup>2</sup>)” shall be deleted and “100 square feet (9.25 m<sup>2</sup>)” shall be inserted.

vi. In Section 1806.3.1, Floors, “60” shall be deleted and “6” shall be inserted.

vii. New Section 1806.5 from Section 1813.8 of the 1996 BOCA National Building Code shall be inserted as follows: “1806.5 Erosion protection: Where water impacts the ground from the edge of the roof, downspout, scupper or other rain water collection or diversion device, provisions shall be made to prevent soil erosion and direct the water away from the foundation.”

viii. Section 1807.2.6, Spacing, shall be deleted in its entirety and Section 1816.9 of the 1996 BOCA National Building Code shall be inserted as follows: “Spacing: The minimum center-to-center spacing of piles shall not be less than twice the average diameter of a round pile, nor less than 1-3/4 times the diagonal dimension of a rectangular pile. Where driven to or penetrating into rock, the spacing shall not be less than 24 inches (610 mm). Where receiving principal support at the end from materials other than rock, or through friction resistance, the spacing shall not be less than 30 inches (762 mm) except that for piles having enlarged bases formed either by compacting concrete or driving a pre-cast base, the minimum center-to-center spacing shall be 4 1/2 feet (1372 mm). The spacing of piles shall be such that the average load on the supporting strata will not exceed the safe load-bearing value of those strata as determined by test borings or other approved methods.”

ix. In Section 1807.2.23.2, Seismic Design Category D, E, or F, the references to “Seismic Design Categories E and F” shall be deleted.

x. Section 1808.2.2.1, Materials, shall be deleted in its entirety and Section 1821.2.2 of the 1996 BOCA National Building Code shall be inserted as follows: “All concrete shall have a 28-day specified compressive strength ( $f'_c$ ) of not less than 4,000 psi (27579 kPa).”

17. Chapter 21, Masonry, shall be amended as follows:

i. In Figure 2111.1, Fireplace and Chimney Details, in the plan view illustration, Letter B is improperly dimensioned. The text of Section 2111.10 shall prevail.

18. Chapters 27, Electrical; 28, Mechanical Systems; and 29, Plumbing, shall be deleted in their entirety.

19. Chapter 30, Elevators and Conveying Systems, shall be amended as follows:

i. In Section 3001.1, Scope, “and where applicable N.J.A.C. 5:23-12” shall be inserted after “chapter.”

ii. In Section 3001.2, Referenced standards, “this code” shall be deleted and “these rules” shall be inserted. In the same section, “with the exception of Rule 1206.1h, Part XX and Part XXI” shall be inserted after “ASME A17.1” and “ASME A18.1” shall be inserted after “ASME A90.1.” In addition, at the end of the section, the following shall be inserted: “The scope of Part XXIV of ASME A17.1, entitled “Elevator Safety Requirements for Seismic Risk Zone 2 or Greater,” is deleted.”

iii. New Section 3002.4.1, Elevators in newly constructed multiple dwellings, shall be inserted as follows: “When an elevator is installed in a newly-constructed multiple dwelling, the elevator shall meet the dimensional requirements above.”

iv. In Section 3004.4, Closed vents, “annealed glass” shall be deleted and “plain glass” shall be inserted.

v. In Section 3004.5, Plumbing and mechanical systems, the exception shall be deleted.

20. Chapter 31, Special Construction, shall be amended as follows:

i. New Section 3102.3.2, which shall be the text of Section 3104.6 of the 1996 BOCA National Building Code, shall be inserted as follows: “Certification: An affidavit or affirmation shall be submitted to the code official and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit or affirmation shall attest to the following information relative to the flame-resistance of the fabric:

1. Names and addresses of the owners of the tent or air-supported structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in treatment
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.”

ii. Section 3103.1.1 shall be deleted in its entirety and the following shall be inserted:

“(1) Temporary structures: A construction permit is required for the erection, operation or maintenance of all temporary structures (excluding tents and tensioned membrane structures) covering an area in excess of 120 square feet, including all connecting areas or spaces with a common means of egress or entrance, or which are used or intended to be used for gatherings of 10 or more persons;

(2) Tents with appurtenances: A construction permit is required for the erection, operation or maintenance of all tents or tensioned membrane

structures of any size if they contain appurtenances such as platforms or electrical equipment;

(3) Tents without appurtenances: No permit is required for the erection, operation or maintenance of any tent or tensioned membrane structure without appurtenances if the tent or structure is no more than 900 square feet in area and no more than 30 feet in any dimension (excluding canopies), whether it is one unit or composed of multiple units. Tents used exclusively for recreational camping purposes shall be exempt from the above requirements.

(4) A temporary greenhouse, also called a “hoop-house” or “polyhouse,” used exclusively for the production or storage of live plants, shall be exempt from the permit requirements of the Uniform Construction Code if it meets the following criteria:

(A) There is no permanent anchoring system or foundation;

(B) There is no storage, temporary or otherwise, of solvents, fertilizers, gases, or other chemical or flammable materials;

(C) The structure is no wider than 31 feet and there is an unobstructed path of no greater length than 150 feet from any point to a door or fully accessible wall area; and

(D) The covering of the structure is of a material no greater than six nails (152.4 micrometers) in thickness, conforming to NFPA 701 standard, that yields approximately four pounds of maximum impact resistance to provide egress through the wall.

(5) The provisions of the Uniform Construction Code at NJAC 5:23-3.14(b)20ii(4) notwithstanding, if a temporary greenhouse contains any device subject to the electrical subcode or any mechanical equipment subject to the mechanical subcode, a permit shall be required for the device, system or fixture only. If the temporary greenhouse is connected to a potable water system, a permit shall be required for the backflow prevention devices only.

iii. Section 3109, Swimming Pool Enclosures, shall be deleted in its entirety and the following shall be inserted:

“3109

SWIMMING POOLS, SPAS AND HOT TUBS

3109.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lots of one – or two-family dwellings.

3109.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

BARRIER.

A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB.

See “Swimming pool.”

IN-GROUND POOL.

See “Swimming pool.”

RESIDENTIAL.

That which is situated on the premises of a detached one – or two – family dwelling or a one – family townhouse not more than three stories in height.

**SPA, NONPORTABLE.**

See “Swimming pool.”

**SWIMMING POOL.**

Any structure intended for swimming or recreational bathing that contains water, provided that these regulations shall not be applicable to any such pool less than 24 inches (610 mm) deep or having a surface area less than 250 square feet (23.25 m<sup>2</sup>).

This includes in – ground, aboveground and on – ground swimming pools, hot tubs and spas.

**SWIMMING POOL, INDOOR.**

A swimming pool that is totally contained within a structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR.**

Any swimming pool, which is not an indoor pool.

3109.3 In-ground public pools. In – ground pools shall be designed and constructed in conformance with ANSI/NSPI – 1 as listed in Chapter 35.

3109.4 In-ground Residential pools. In – ground residential pools shall be designed and constructed in conformance with ANSI/NSPI – 5 as listed in Chapter 35.

3109.5 Permanently installed public spas and hot tubs. Permanently installed public spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI – 2 as listed in Chapter 35.



3109.6 Portable residential spas and hot tubs. Portable residential spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Chapter 35.

3109.7 Enclosures for private swimming pools, spas and hot tubs. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs.

3109.7.1 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier, which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

3. Solid barriers, which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 1.25-inch (32 mm) square unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to not more than 1.75 inches (44 mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching

device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

9. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:

9.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

9.2. The ladder or steps shall be surrounded by a barrier that meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

3109.8 Barrier exceptions. Spas or hot tubs with a safety cover that complies with ASTM F 1346, as listed in Chapter 35, shall be exempt from the provisions of this section.

3109.9 Enclosures for public swimming pools, spas and hot tubs. Public swimming pools shall be completely enclosed by a fence at least 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch (102 mm) diameter sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.”

21. Chapter 32, Encroachments into the Public Rights of Way, shall be amended as follows:

i. In Section 3202.1.2, Vaults and other enclosed spaces, “authority or legislative body having jurisdiction” shall be deleted and “Uniform Construction Code (N.J.A.C. 5:23)” shall be inserted.

ii. In Section 3202.3.4, Pedestrian walkways, “authority having jurisdiction” shall be deleted and “the construction official” shall be inserted.

iii. In Section 3202.4, Temporary encroachments, “local authority having jurisdiction” shall be deleted and “municipality” shall be inserted.

22. Chapter 33, Safeguards During Construction, shall be amended as follows:

i. Sections 3303.1, Construction documents; 3303.2, Pedestrian protection; 3303.4, Vacant lot; 3303.5, Water accumulation; and 3303.6, Utility connections, shall be deleted in their entirety.

ii. In Section 3308.1, Storage and handling of materials, “authority having jurisdiction” shall be deleted and “construction official” shall be inserted.

iii. In the last sentence of Section 3309.1, Where required, “On construction sites,” shall be inserted before “All.” In addition, in the last sentence, “Section 906” shall be deleted and “the International Fire Code” shall be inserted.

23. Chapter 34, Existing Structures, shall be deleted in its entirety.

24. Chapter 35, Referenced Standards, shall be amended as follows:

i. Under the subheading “ASME,” the following reference shall be inserted: “ASME A18.1-1999, Safety Standard for Platform Lifts and Stairway Chairlifts, with A18.1a-2001 addenda.”

ii. Under the subheading “NFPA,” “NFPA 13-96, Installation of Sprinkler Systems; NFPA 13D-96, Installation of Sprinkler Systems in One - and Two-family Dwellings and Manufactured Homes; and NFPA 13R-96, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height” shall be deleted and “NFPA 13-99 Installation of Sprinkler Systems; NFPA 13D-99, Installation of Sprinkler Systems in One - and Two- family Dwellings and Manufactured Homes; and NFPA 13R-99, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height” shall be inserted. In addition, “NFPA 20-99, Installation of Centrifugal Fire Pumps” shall be inserted after “NFPA 17A-98, Wet Chemical Extinguishing Systems.”

iii. Under the subheading “NSPI” the following NSPI Standards shall be inserted: “ANSI/NSPI-1, Permanently Installed Public In-ground Public Pools, ANSI/NSPI-2, Permanently Installed Public Spas, ANSI/NSPI-3, Standard for Permanently Installed Residential Spas, ANSI/NSPI-4, Standard for Residential Above-Ground/One-Ground Swimming Pools, and ANSI/NSPI-5, Standard for Residential In-ground Swimming Pools.”

25. The Appendices shall be amended as follows:

i. Appendix A, Employee Qualifications; Appendix B, Board of Appeals; Appendix C, Group U-Agricultural Buildings; Appendix D, Fire Districts; Appendix E, Supplementary Accessibility Requirements; Appendix F, Rodent

**Proofing; and Appendix G, Flood Resistant Construction, shall be deleted in their entirety.**

**ii. In Appendix H, at the beginning of the Appendix, the sentence, “The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance,” shall be deleted in its entirety.**

**(1) In Appendix H, Section H101.2, Signs exempt from permits, shall be deleted in its entirety.**

**(2) In Appendix H, Section H105.2, Permits, drawings and specifications, “as provided in Chapter 1” shall be deleted and “as provided in N.J.A.C. 5:23-2.14” shall be inserted.**

**(3) In Appendix H, Section H106.1, Illumination, “ICC Electrical Code” shall be deleted and “electrical subcode” shall be inserted.**

**(4) In Appendix H, Section H106.2, Electrical service, “ICC Electrical Code” shall be deleted and “electrical subcode” shall be inserted.**

**iii. Appendix I, Patio Covers, and Appendix J, Supplementary Accessibility Requirements for Qualified Historic Buildings and Facilities, shall be deleted in their entirety.**

N.J.A.C. 5:23-3.16 Electrical subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c. 217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the National Fire Protection Association, known as “The National Electrical Code [1999] **2002**” as the electrical

subcode for New Jersey.

i. (No change)

2. The National Electrical Code [1999] **2002** may be known and cited as “the electrical subcode.”

i. Codes and standards referenced in the Fine Print Notes (FPNs) of the electrical subcode (NEC [99] **2002**) shall be considered adopted by reference to the extent prescribed by each related section. These codes and standards also are printed in DCA Bulletin # [00-1] **03-1**, which contains a list of adopted codes and standards that are applicable to the enforcement of the electrical subcode.

3. (No change)

(b) The following chapters or articles of the electrical subcode are amended as follows:

**1. Article 80, entitled, “Administration and Enforcement,” is deleted in its entirety.**

[1.] **2.** Article 90 of the electrical subcode, entitled “Introduction,” is amended as follows:

i. Section [90-4] **90.4**, entitled “Enforcement”, is amended to delete in the first paragraph the phrase, “authority having jurisdiction for enforcement of the code” and substitute in lieu thereof, the term “electrical subcode official.” And add a new last sentence in the first paragraph: “Approval shall be in accordance with N.J.A.C 5:23-2.9.” Delete in the second paragraph the phrase “authority having jurisdiction” and substitute in lieu thereof the term “electrical subcode official” and add after “effective safety” the phrase “as provided in N.J.A.C. 5:23-2.9.” Delete in the third paragraph the phrase

“authority having jurisdiction” and substitute in lieu thereof the term “electrical subcode official” and delete the phrase “by the jurisdiction” after the word “adopted.”

ii. Section [90-5] **90.5**, entitled “Mandatory Rules, Permissive Rules, and Explanatory Material,” is amended to add “except as outlined under N.J.A.C. 5:23-3.16(a)2i” after the word “Code” in line 6 under paragraph [(c)]**(C)**.

[2.] **3.** Chapter 1 of the electrical subcode, Article 100, entitled “Definitions,” is amended as follows:

i. The definition of the term “approved” is amended to delete the phrase “the authority having jurisdiction” and substitute in lieu thereof, the phrase “electrical subcode official. Approval shall be in accordance with N.J.A.C. 5:23-3.7, 3.8 and 3.8A.”

ii. [Amend to include the following definition:] **The definition of** “Authority having jurisdiction” **is replaced with** “Unless otherwise specifically noted, the authority having jurisdiction for the Electrical Subcode shall be the Electrical Subcode Official.” [.]

iii. (No change)

[iv. The definition of the term “garage” is amended to add the sentence, “The term cutoff is intended to refer to the appropriate fire separation as required by the building subcode.”]

[3.] **4.** Chapter 2 of the electrical subcode, entitled “Wiring and Protection,” is amended as follows:

i. Section [210-12(b)] **210.12(B)** of Article 210, entitled “Branch Circuits,” is amended to [delete] **insert** the **following sentence** [words “become effective



January 2002.”] at the end of the section, [and in lieu thereof substitute the words] “**This requirement shall** be considered optional.”

[4.]**5.** Chapter 3 of the electrical subcode, entitled “Wiring Methods and Materials,” is amended as follows:

i. Section [300-4(a)(1)] **300.4(A)(1)** is amended to delete the words from “so that the edge . . .” on line four through “. . . cannot be maintained” on line six and in lieu thereof substitute “as required by the building subcode. Where the distance from the edge of the hole to the nearest edge of the wood member is less than 1¼ inches ([31.8] **32** mm).”

**ii. Section 334.12(A)(1) is deleted in its entirety.**

[5.] **6.** Chapter 5 of the electrical subcode, entitled “Special Occupancies,” is amended as follows:

i. [Exception to section 500-5(a)(4), section 514-5(b) and section 514-5(c)] **Sections 514.11(B) and 514.11(C)** are amended to delete the phrase “authority having jurisdiction” and substitute in lieu thereof the phrase “fire protection subcode official.”

ii. Part [B] **II** of Article 550, entitled “Mobile Homes, Manufactured Homes, and Mobile Home Parks” comprising sections [550-5] **550.11** through [550-15] **550.25** is deleted. [in its entirety,with the exception of section 550-5 which] **Section 550.10** shall be retained.

(1) Exception-Part [B] **II** is retained in its entirety in the case of mobile/manufactured homes undergoing repair, **renovation**, or alteration [work].

(A) Section 550.25 is amended to add the following sentence at the end of the section: **“This requirement shall be considered optional.”**

iii. In Article 551, entitled “Recreation Vehicles and Recreation Vehicle Parks,” delete from the title the words “Recreational Vehicles and.”

(1) Section [551-1] **551.1** is amended to delete the phrase “within or on recreational vehicles” on line 2.

(2) Parts [B, C, D, E and F] **II, III, IV, V and VI**, comprising sections [551-10] **551.10** through [551-60] **551.60**, are deleted in their entirety, with the exception of Figure [551-46(c)] **551.46(C)**, which shall be retained.

iv. The following amendments are made to Article 552, entitled “Park Trailers”:

(1) Parts [B] **II** and [C] **III** comprising sections [552-10] 552.10 through [552-20] **552.20** are deleted in their entirety.

(2) Part [D] **IV** comprising sections [552-40] **552.40** through [552-59] **552.59** is deleted with the exception of sections [552-43, 552-44] **552.43, 552.44** and [552-47] **552.47** which shall be retained.

(3) Part [E] **V** is deleted in its entirety.

N.J.A.C. 5:23-3.21 One and two-family dwelling subcode

(a) Rules concerning the subcode are adopted as follows:

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the [Council of American Building Officials known as the “CABO One and Two Family Dwelling Code/1995]

**International Code Council, International Residential Code known as the**

**“IRC/2000”** as the one-and two-family dwelling subcode in New Jersey subject to the modifications stated in (c) below.

i. Copies of this code may be obtained from [BOCA International,] **the International Code Council at** 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

**ii. The IRC/2000 may be known and cited as the one-and two-family dwelling subcode.**

[(b) The provisions of this subcode shall apply to the construction, alteration, repair or increase in size of detached one or two-family dwellings, or single-family townhouses, of Use Group R-4, of Type 5B construction not more than two stories or 35 feet in height and 4,800 square feet in area per floor. For the purposes of applying this section, a habitable attic shall not constitute a story. A habitable attic shall be an attic, which has a stairway as a means of access and egress and in which the ceiling area at a height of 7 <sup>1/3</sup> feet (2,235 mm) above the attic floor is not more than one-third the area of the next floor below.

1. The use of the CABO Code for the construction of one or two family detached dwellings, as described in (b) above, in flood prone areas shall be permitted. The requirements of Section 3107.0 of the building subcode shall supplement the requirements of the One and Two-Family Dwelling Subcode when dwellings are built in flood prone areas as identified by the most recent Flood Insurance Rate Map published by the Federal Emergency Management Agency.]

**(b) The provisions for one-and two-family dwellings shall apply to the construction of detached one - and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress. It shall also apply to accessory structures.**

(c) The following chapters or sections of the [one and two-family dwelling subcode] **IRC/2000** shall be modified as follows:

[1. Chapter 1, entitled “General Administration” is deleted in its entirety.

2. Chapter 2, entitled “Building Definitions,” is amended as follows:

i. The definition of the term “approved” is deleted. In lieu thereof substitute “approved by the building subcode official or other authority having jurisdiction in accordance with the regulations.”

ii. The definition of the term “Approved Agency” is amended to add the phrase “or other authority having jurisdiction in accordance with the UCC” after the word “Official” on line 4.

iii. The definition of the term “Building Official” is deleted and is redefined herein and throughout the subcode as the “building subcode official” as defined in N.J.A.C. 5:23-1.4 unless indicated otherwise.

iv. The definition of the term “Grade Plane” is deleted. In lieu thereof substitute: “A reference plane representing the average elevation of finished ground level adjoining the building at all exterior walls. When the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line, or when the lot line is more than 6 feet from the building, between the building and a point 6 feet from the building.”

iv. The definition of the term “Story” is amended to delete “except that the topmost story shall be that habitable portion of a building included between the upper surface of the topmost floor and ceiling or roof above.”

3. Chapter 3, entitled “Building Planning” is amended as follows:

i. Section 301.2 is amended to modify Table 301.2a to read as follows:

Table No. 301.2a

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

			Subject to	Subject	
Roof Snow From Load (lbs./sq. ft.)	Wind Pressure (lbs./sq. ft.)	Seismic Condition by Zone	Damage from Weathering	Frost Line Depth	Damage Termite Decay
20 Yes See note 3	see notes 4,5, 6 and fig. 301.2d	see note 2	severe  see note 1	2'-6"  (Southern Area) 3'-0" (Northern Area) See Notes 1, 2 and 3	Yes

Notes:

1. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy structural requirements of this code. The grade of masonry units shall be determined from the ASTM C34, C55, C62, C73, C90, C129, C145, C216, or C625 listed in Chapter 47. The frost line depth may require deeper footings than indicated in figure 403.1a.

2. New Jersey is divided into two zones; Zone one consists of Monmouth and Burlington Counties and all counties to the south. Zone 2 consists of Mercer and Middlesex Counties and all counties to the north.

3. The enforcing agency having jurisdiction may establish values other than the ones listed for "roof snow load," and "frost line depth" if warranted by documented local climatic and geographic conditions.

4. Wind speed for Atlantic, Cape May, Monmouth and Ocean counties, and Bass River, Washington, and Woodland townships in Burlington County shall be 90 mph.

5. Wind speed for Bergen, Camden, Cumberland, Essex, Gloucester, Hudson, Mercer, Middlesex, Morris, Passaic, Salem, Somerset, Union, and Burlington (except for Bass River, Washington, and Woodland townships) counties shall be 80 mph

6. Wind speed for Hunterdon, Warren and Sussex counties shall be 70 mph.

ii. Section 302.1, in the first and fourth lines, delete “3 feet” and substitute in lieu thereof, “5 feet.”

iii. Sections 303.4 and 303.4.1 are deleted in their entirety.

iv. Section 303.6 “Required Heating” is deleted.

v. Section 309.1 Opening Protection—Delete and substitute in lieu thereof the following: “Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid core wood doors not less than 1 ¾ inches in thickness or approved equivalent. The sills of all door openings between garages and adjacent interior spaces shall be raised not less than 4 inches above the garage floor.”

vi. Section 309.2—Separation Required—Delete and substitute in lieu thereof the following: “Private garages located beneath rooms shall have walls, partitions, floors and ceilings separating the garage from the adjacent interior spaces constructed with not less than 1 hour fire resistance rating. Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by means of ½ inch gypsum board or equivalent applied to the garage side.”

vii. Section 310.2.1—Minimum size—In the second sentence, in the fourth line, delete “22 inches (559)mm)” and substitute in lieu thereof “24 inches (610 mm).”

viii. Section 312.1, under the second exception in the second line, delete “8 ¼ inches” and substitute in lieu thereof, “8 inches”;

ix. Sections 314.1, 314.2, 314.2.1 and 314.3 are deleted and substitute in lieu thereof the text of Section R-213.1 of the 1992 CABO One and Two Family Dwelling Code as follows:

“R-213.1 General: When risers are closed, all treads may have a uniform projection not to exceed 1 ½ inches. The greatest riser height within a flight of stairs shall not exceed the smallest by more than 3/8 inch. The greatest tread run within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Stairways shall not be less than 3 feet clear width, and the headroom, rise and run shall conform to the following requirements from Figure No. R-213.1 of the 1992 CABO One and Two-Family Dwelling Code. As per this figure, tread depth is 9” minimum, riser height is 8 ¼” maximum and headroom is 6’8” minimum. Handrails may project from each side of a stairway a distance of 4 ½ inches into the required width.”

x. Section 314.4 is amended to change “10 inches (254 mm)” in the third line to “9 inches (229 mm).”

xi. Section 314.6 is amended to change “10 inches (254 mm)” in the fourth line to “9 inches (229 mm).”

xii. Section 314.7 is deleted in its entirety;

xiii. Section 315.2 is deleted and substitute in lieu thereof the following text from Section R-214.1 of the 1992 CABO One and Two-Family Dwelling Code.

“The handgrip portion of handrails shall not be more than 2 5/8 inches in cross-sectional



dimension, or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners.”

xiv. Section 316.1.1 entitled “Alterations, repairs and additions” is deleted in its entirety.

xv. In Section 317.2.4, after the words “foam filled doors” add the phrase “except for fire doors”;

xvi. Section 324 is deleted in its entirety.

4. Chapter 4, entitled “Foundations,” is amended as follows:

i. Section 404.1, Concrete and Masonry, is amended to delete the exception.

ii. Section 404.2 is deleted and replaced with the following text from the 1992 edition of the CABO One and Two-Family Dwelling Code, Section R-304.4; “Foundation walls subject to more pressure than would be exerted by backfill having an equivalent fluid weight of greater than 30 pounds per cubic foot (4.72 kN/m<sup>3</sup>) shall be designed in accordance with accepted engineering practices.”

iii. In Section 405.1, the exception is amended to delete the text and substitute the following language from the 1992 edition of the CABO One and Two Family Dwelling Code, Section R-305.1: “A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils.”

iv. Section 407 of the 1995 CABO One and Two-Family Dwelling Code entitled “Foundation Insulation” is deleted in its entirety.

v. Add new section 410 “Pile Foundation,” as follows: “Pile foundations utilized in buildings under the scope of this subcode shall be regulated by Chapter 18 of the building subcode.”

5. Chapter 5, entitled “Floors,” is amended as follows:

- i. In Section 501.1, replace the phrase “Section 108” with the phrase “N.J.A.C. 5:23-3.6 and 3.7.”
- ii. In Section 501.2, delete the words “imposed according” from line three.
- iii. In Section 502.4, replace the word “approval” with “approved”.
- iv. In Section 505.2.2, delete the exception and replace it with the following text: “Except where required by the radon subcode, a base course is not required when the concrete slab is installed on well-drained or sand-gravel mixture soils.”
- v. In Section 505.2.3, exception, insert the phrase “Where permitted by the radon subcode,” at the beginning of line one.

6. Chapter 6, entitled “Wall Construction,” is amended as follows:

- i. In Section 601.1, delete the words “Section 108” and in lieu thereof insert “N.J.A.C. 5:23-3.6 and 3.7”;
- ii. Delete Section 604.1.1.

7. Chapter 7, entitled “Wall Covering,” is amended as follows;

- i. In Section 701.1, delete the words “Section 108” and in lieu thereof insert “N.J.A.C. 5:23-3.6 and 3.7”;

8. Chapter 8, entitled “Roof Ceiling Construction,” is amended as follows:

- i. In Section 801.1, delete the words “Section 108” and in lieu thereof insert “N.J.A.C. 5:23-3.6 and 3.7”;

9. Chapter 9, entitled “Roof Coverings,” is amended as follows:

- i. In Section 901.1, delete the words “Section 108” and in lieu thereof insert “N.J.A.C. 5:23-3.6 and 3.7”;
- ii. In Section 901.3, “Roof Covering Materials”, on line three, delete the phrase “in areas...3 feet” and replace with the phrase: “when the edge of the roof is less than 6 feet (1829 mm)”;
- iii. Section 910.1 is amended to delete the words “Sections 117 and” and substitute the word “Section” and to delete the sentence “When the repair...for the new roofing.”
- iv. Section 910.3, item number 3 is amended to delete the word “three” and substitute in lieu thereof “two”.

10. Chapter 10, entitled “Chimneys and Fireplaces,” is amended as follows:

- i. Section 1001.7 is amended to add the following phrase after “1800° F”: “and embedded in medium duty refractory mortar complying with ASTM C105.” Delete the Exception.
- ii. Section 1002 is amended to add the sentence: “Factory-built chimneys shall conform to UL 103 and be installed in accordance with their listing.”
- iii. In Section 1003.4, in the last line, change “10 inches” to “12 inches.”
- iv. In Section 1003.7, in the second line, change “2 inches (51 mm) thick” to 4 inches (102 mm) solid masonry or equivalent.”
- v. In Section 1003.9, in the second and fifth lines, change “2 inches (51 mm)” to “4 inches (102 mm)” and add the sentence “The minimum clearance to combustibles from the exterior surface of the smoke chamber shall be 2 inches (51 mm).”

vi. Section 1004.1, item #4 is amended to add the following after the word “opening”: “for a fireplace having an opening of less than 6 square feet. The hearth of a fireplace with a larger opening shall extend a minimum of 20 inches (508 mm) beyond the face of the fireplace opening and a minimum of 12 inches (305 mm) on each side of the fireplace opening.” Also, in item #5 of Section 1004.1, delete the text and substitute in lieu thereof: “Factory-built fireplaces shall be listed, labeled and tested according to UL 127, and installed according to their listing.”

vii. Section 1005.1 is amended to add “Factory-built fireplace stoves shall be tested according to UL 737.” to the end of the section.

11. Chapter 11 entitled, “Mechanical Administration” is amended as follows:

i. Section 1101.2 is deleted;

ii. Section 1103 is deleted.

12. Chapter 12, entitled “Mechanical Definitions,” is amended as follows:

i. In Section 1202.0, the term and definition “Unusually tight construction” are deleted.

13. Chapter 13 entitled, “General Mechanical System Requirements” is amended as follows:

i. Section 1304.1 is amended to add the sentence, “This section shall not preclude the employees of a natural gas utility from converting existing liquefied petroleum installations to natural gas without permits.”

ii. Section 1307.1 is amended to delete the last sentence.

iii. Section 1307.4 is deleted.

14. Chapter 14, entitled “Heating and Cooling Equipment,” is amended as follows:

- i. Section 1401.3 is deleted.

15. Chapter 15 entitled, “Electric Resistance Heating” is amended as follows:

- i. Section 1501.1 is amended to delete the words “Chapters 39-46 of this code” and substitute in lieu thereof “the requirements of the electrical subcode.”

- ii. Section 1502.1 is amended to delete the words “Chapters 39-46 of this code” and substitute in lieu thereof “the requirements of the electrical subcode.”

- iii. Section 1502.2 is amended to delete the words “Chapters 39-46 of this code” and substitute in lieu thereof “the requirements of the electrical subcode.”

- iv. Section 1503.1 is amended to delete the words “Chapters 39-46 of this code” and substitute in lieu thereof “the requirements of the electrical subcode.”

16. Chapter 21 entitled, “Chimneys and Vents” is amended as follows:

- i. Section 2101.3 is amended to replace the words “cleaned and free of obstructions.” with the words “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(c).”

17. Chapter 25 entitled, “Hydronic Piping” is amended as follows:

- ii. Section 2501.3 is amended to delete the words “Chapter 29-38 of this code” and substitute in lieu thereof “the requirements of the plumbing subcode.”

- iii. Section 2501.4 is amended to delete the words “the provisions listed in Section 3402” and substitute in lieu thereof “the requirements of the plumbing subcode.”

18. Chapter 26 entitled, “Fuel-Gas Piping” is amended as follows:

- i. Section 2602 is deleted;

ii. Section 2603.1 is deleted;

iii. Section 2603.2 is deleted;

iv. Section 2603.3 is deleted

v. Section 2608.9 is amended to delete the words “Chapters 39-46 of this code” and substitute in lieu thereof “the requirements of the electrical subcode.”

19. Chapters 29 through 46 are deleted.

20. Appendices A through F are deleted.]

**1. Chapter 1, General Administration, shall be deleted in its entirety. In addition, any referenced section of Chapter 1 shall be deleted throughout the code and “the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23)” shall be inserted.**

**2. Chapter 2, Definitions, shall be amended as follows:**

**i. The definition of “Additions” shall be deleted.**

**ii. The definition of “Alteration” shall be deleted.**

**iii. The definition of “Approved” shall be deleted and the following shall be inserted: “Approved refers to approval by the building subcode official or other authority having jurisdiction in accordance with the regulations.”**

**iv. In the definition of “Approved Agency,” “or other authority having jurisdiction in accordance with the Uniform Construction Code” shall be inserted after “Official.”**

**v. The definitions of “Building” shall be deleted and the definition at N.J.A.C. 5:23-3.14(b)2iv shall be inserted.**

**vi. The definition of “Building, Existing” shall be deleted.**

vii. The definition of “Building Line” shall be deleted.

viii. The definition of “Building Official” shall be deleted and the definition at N.J.A.C. 5:23-3.14(b)2vi shall be inserted.

ix. The definition of “Existing Installations” shall be deleted.

x. The definition of “Jurisdiction” shall be deleted.

xi. The definition of “Manufactured Home” shall be deleted.

xii. The definition of “Owner” shall be deleted and the definition at N.J.A.C. 5:23-3.14(b)2viii shall be inserted.

xiii. The definition of “Permit” shall be deleted.

xiv. The definition of “Person” shall be deleted.

xv. In the definition of “Potable Water,” “public health authority having jurisdiction” shall be deleted and “Public Health Drinking Water Standards or the regulations” shall be inserted.

xvi. The definition of “Repair” shall be deleted.

3. Chapter 3, Building Planning, shall be amended as follows:

i. In Section R301.2.1.1, Design criteria, “with the provisions of this code or” shall be inserted after “accordance.” In addition, Item 2 shall be deleted.

ii. In Section R301.2.1.2, Internal pressure, in the exception, “in one- and two-story buildings” shall be deleted from the first sentence.

iii. Table R301.2(1), Climatic and Geographic Design Criteria, shall be amended as follows:

**Table No. 301.2(1)**  
**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

<u>Roof Snow Load</u> <u>(lbs./sq. ft.</u> <u>from</u>	<u>Wind Speed</u> <u>(mph)</u>	<u>Seismic Design</u> <u>Category</u>	<u>Subject to</u> <u>Damage from</u>  <u>Weathering</u>	<u>Frost Line</u> <u>Depth</u>  <u>Termite</u>	<u>Subject to</u> <u>Damage</u>  <u>Decay</u>
<u>20</u> <u>see note 4</u>	<u>see</u> <u>fig. R301.2(4)</u>	<u>N/A</u>	<u>severe</u> <u>see note 1</u>	<u>2'-6"</u> <u>Southern</u> <u>Area)</u> <u>Moderate</u>	<u>Moderate</u> <u>to</u> <u>Heavy</u>  <u>3'-0"</u> <u>(Northern</u> <u>Area) See</u> <u>Notes 2, 3 and 4</u>

**Notes:**

- 1. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy structural requirements of this code. The grade of masonry units shall be determined from the ASTM C34, C55, C62, C73, C90, C129, C145, C216, or C625 listed in Chapter 43.**
- 2. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with minimum depth of footing below finish grade.**
- 3. New Jersey is divided into two zones: Zone one consists of Monmouth and Burlington Counties and all counties to the south. Zone 2 consists of Mercer and Middlesex Counties and all counties to the north.**
- 4. The enforcing agency having jurisdiction may establish values other than the ones listed for "roof snow load," and "frost line depth" if warranted by documented local climatic and geographic conditions."**



iv. In Section R301.2.2, Seismic provisions, “and single-family townhouses” shall be inserted after “Detached one - and two -family dwellings.”

v. Section R303.4, Stairway illumination, shall be deleted in its entirety.

vi. Section R303.6, Required heating, shall be deleted in its entirety.

vii. In Section R308.4, Hazardous locations, Item 9 shall be deleted.

In the same section, Exception 9 shall be deleted.

viii. Section R309.2, Separation required, shall be deleted and the following shall be inserted: “Private garages located beneath rooms shall have walls, partitions, floors and ceilings separating the garage from the adjacent interior spaces constructed with not less than a 1-hour fire resistance rating. Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by a means of ½-inch gypsum board or equivalent applied to the garage side.”

ix. In Section R310.1, Emergency escape and rescue required, “Basements with habitable spaces and” shall be deleted. The sentence shall start with “Every”.

x. In Section R314.2, Treads and risers, “7 ¾ inches (196 mm)” shall be deleted and “8 ¼ inches (210 mm)” shall be inserted. In the same section, “10 inches (254 mm)” shall be deleted and “9 inches (229 mm)” shall be inserted.

xi. In Section R314.4, Winders, “10 inches (254 mm)” shall be deleted and “9 inches (229 mm)” shall be inserted.

xii. In Section R314.6, Circular stairways, “6 inches (152 mm)” shall be deleted and “9 inches (229 mm)” shall be inserted.

xiii. Section R314.7, Illumination, shall be deleted in its entirety.

xiv. Section R315, Handrails, shall be deleted in its entirety and Sections 315.1, Handrails, of the 1995 edition of the Council of American Building Officials One - and Two-Family Dwelling Code (1995 CABO One - and Two -Family Dwelling Code) shall be inserted as follows: “Handrails. Handrails having minimum and maximum heights of 30 inches and 38 inches (762 mm and 965 mm), respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways of three or more risers. Spiral stairways shall have the required handrail located on the outside of the radius. All required handrails shall be continuous the full length of the stairs. Ends shall be returned or shall terminate the newel posts or safety terminals. Handrails adjacent to a wall shall have a space not less than 1 ½ inches (38 mm) between the wall and the handrail.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at a turn.

2. The use of a volute, turnout, or starting easing shall be allowed over the lowest tread.

xv. Section R316.2, Guard opening limitations, “Required guards shall not be constructed with horizontal rails or other ornamental patterns that result in a ladder effect.” shall be deleted in its entirety.

xvi. Section R317.1.1, Alterations, repairs and additions, shall be deleted in its entirety.

xvii. In Section R317.2, Power source, “Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs, or additions regulated by Section R317.1.1.” shall be deleted.

xviii. In Section R321.1, Dwelling unit separation, “13R, or 13D” shall be inserted after “NFPA 13.”

xix. Section R325.1, Site address, shall be deleted in its entirety.

4. Chapter 4, Foundations shall be amended as follows:

i. In Table R401.4.1, Presumptive Load Bearing Values of Foundation Materials, “12,000; 4,000; 3,000; 2,000; and 1,500<sup>b</sup>” shall be deleted and “12,000; 6,000; 5,000; 3,000; and 2,000” shall be inserted.

ii. In Section R404.1, Concrete and masonry foundation walls, the second sentence shall be deleted.

iii. In Section R404.4, Insulating concrete form foundation walls, the second sentence shall be deleted.

iv. Sections R405, Foundation Drainage, and R406, Foundation Waterproofing and Dampproofing, shall be deleted and the text of Section 1806, Dampproofing and Waterproofing from the International Building Code (IBC)/2000 shall be inserted as follows: “R406.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and dampproofed in accordance with this section, with the exception

of those spaces containing groups other than residential and institutional where such omission is not detrimental to the building or occupancy.

R406.1.1 Story above grade. Where a basement is considered a story above grade and the finished ground level adjacent to the basement wall is below the basement floor elevation for 25 percent or more of the perimeter, the floor and walls shall be dampproofed in accordance with Section R406.2 and a foundation drain shall be installed in accordance with Section R406.4.1. The foundation drain shall be installed around the portion of the perimeter where the basement floor is below ground level. The provisions of Sections R406.3 and R406.4.1 shall not apply in this case.

R406.1.2 Underfloor space. The finished ground level of an underfloor space such as a crawl space shall not be located below the bottom of the footings. Where there is evidence that the ground water table rises to within 6 inches (152 mm) of the ground level at the outside building perimeter or where there is evidence that the surface water does not readily drain from the building site, the ground level of the underfloor space shall be as high as the outside finished ground level, unless an approved drainage system is provided. The provisions of Sections R406.2 , R406.3 and R406.4 shall not apply in this case.

R406.1.2.1 Floor hazard areas. For buildings and structures in flood hazard areas as established in Section R327, the finished ground level of an underfloor space such as a crawl space shall be equal to or higher than the outside finished ground level.

R406.1.3 Ground-water control. Where the ground-water table is lowered and maintained at an elevation not less than 6 inches (152 mm) below the bottom of the lowest floor, the floor and walls shall be dampproofed in accordance with Section R406.2. The design of the system to lower the ground-water table shall be based on accepted principles of engineering that shall consider, but not necessarily be limited to, permeability of the soil, rate at which water enters the drainage system, rated capacity of pumps, head against which pumps are to pump; and the rated capacity of the disposal area of the system.

R406.2 Dampproofing required. Where hydrostatic pressure will not occur, floors and walls for other than wood foundation systems shall be dampproofed in accordance with this section. Wood foundation systems shall be constructed in accordance with AFPA TR7.

R406.2.1 Floors. Dampproofing materials for floors shall be installed between the floor and the base course required by Section R406.4.1, except where a separate floor is provided above a concrete slab.

Where installed beneath the slab, dampproofing shall consist of not less than 6-mil (0.006 inch; 0.152 mm) polyethylene with joints lapped not less than 6 inches (152 mm), or other approved methods or materials. Where permitted to be installed on top of the slab, dampproofing shall consist of mopped-on bitumen, not less than 4-mil (0.004 inch; 0.102 mm) polyethylene, or other approved methods or materials. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.2.2 Walls. Dampproofing materials for walls shall be installed on the exterior surface of the wall, and shall extend from the top of the footing to above ground level.

Dampproofing shall consist of a bituminous material, 3 pounds per square yard (16N/m<sup>2</sup>) of acrylic modified cement, 1/8-inch (3.2 mm) coat of surface-bonding mortar complying with ASTM C 887, any of the materials permitted for waterproofing by Section R406.3.2, or other approved methods or materials.

R406.2.2.1 Surface preparation of walls. Prior to application of dampproofing materials on concrete walls, holes and recesses resulting from the removal of form ties shall be sealed with a bituminous material or other approved methods or materials. Unit masonry walls shall be parged on the exterior surface below ground level with not less than 3/8 inch (9.5 mm) of Portland cement mortar. The parging shall be coved at the footing.

Exception: Parging of unit masonry walls is not required where a material is approved for direct application to the masonry.

R406.3 Waterproofing required. Where the ground-water investigation indicates that a hydrostatic pressure condition exists, and the design does not include a ground-water control system as described in Section R406.1.3, walls and floors shall be waterproofed in accordance with this section.

R406.3.1 Floors. Floors required to be waterproofed shall be of concrete, designed and constructed to withstand the hydrostatic pressures to which the floors will be subjected.

Waterproofing shall be accomplished by placing a membrane of rubberized asphalt, butyl rubber, or not less than 6-mil polyvinyl chloride with joints lapped not less than 6 inches (152 mm) or other approved materials under the slab. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2 Walls. Walls required to be waterproofed shall be of concrete or masonry and shall be designed and constructed to withstand the hydrostatic pressures and other lateral loads to which the walls will be subjected.

Waterproofing shall be applied from the bottom of the wall to not less than 12 inches (305mm) above the maximum elevation of the ground water table. The remainder of the wall shall be dampproofed in accordance with Section R406.2.2. Waterproofing shall consist of two-ply hot-mopped felts, not less than 6-mil (0.006 inch; 0.152mm) polyvinyl chloride, 40-mil (0.040 inch; 1.02 mm) polymer-modified asphalt, 6-mil (0.006 inch; 0.152 mm) polyethylene or other approved methods or materials capable of bridging nonstructural cracks. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2.1 Surface preparation of walls. Prior to the application of waterproofing materials on concrete or masonry walls, the walls shall be prepared in accordance with Section R406.2.2.1.

R406.3.3 Joints and penetrations. Joints in walls and floors, joints between the wall and floor, and penetrations of the wall and floor shall be made watertight utilizing approved methods and materials.

R406.4 Subsoil drainage system. Where a hydrostatic pressure condition does not exist, dampproofing shall be provided and a base shall be installed under the floor and a drain installed around the foundation perimeter. A subsoil drainage system designed and constructed in accordance with Section R406.1.3 shall be deemed adequate for lowering the ground-water table.

R406.4.1 Floor base course. Floors of basements, except as provided for in Section R406.1.1, shall be placed over a floor base course not less than 4 inches (102 mm) in thickness that consists of gravel or crushed stone containing not more than 10 percent of material that passes through a No. 4 (4.75 mm) sieve.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required.

R406.4.2 Foundation drain. A drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 (4.75 mm) sieve. The drain shall extend a minimum of 12 inches (305 mm) beyond the outside edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than 6 inches (152 mm) above the top of the footing. The top of the drain shall be covered with an approved filter membrane material. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or the top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than 2 inches (51



mm) of gravel or crushed stone complying with Section R406.4 and shall be covered with not less than 6 inches (152 mm) of the same material.

R406.4.3 Drainage discharge. The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the plumbing subcode.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required.”

5. Chapter 6, Wall Construction, shall be amended as follows:

i. In Figure R602.6.1, Notching and Bored Hole Limitations for Exterior Walls and Bearing Walls, “six-16 penny nails” shall be deleted and “3-8d nails” shall be inserted.

ii. In Table R602.10.3, Wall Bracing, under the column “Seismic Design Category or Wind Speed,” at Category D<sub>1</sub> and D<sub>2</sub>, “less than 110 mph” shall be deleted and “less than 120 mph” shall be inserted.

iii. Section R606.1.1, Professional registration not required, shall be deleted in its entirety.

iv. In Section R611.1, General, the second sentence shall be deleted

6. Chapter 8, Roof-Ceiling Construction, shall be amended as follows:

i. Table R802.11, Required Strength of Truss or Rafter Tie-Down Connections to Resist Wind Uplift Forces<sup>a,b,c,d</sup>, shall be deleted and the following shall be inserted:

**“Required Strength of Truss or Rafter Tie-Down Connections to Resist Wind Uplift Forces<sup>a,b,c,d</sup>**  
**(Pounds per tie-down connection)**

<b><u>Design Wind Load</u></b> <b><u>(psf)<sup>d</sup></u></b>	<b><u>Total Roof Width Including Overhang (feet)</u></b>				
	<b><u>24</u></b>	<b><u>28</u></b>	<b><u>32</u></b>	<b><u>36</u></b>	<b><u>40</u></b>
<b><u>20</u></b>	<b><u>192</u></b>	<b><u>224</u></b>	<b><u>256</u></b>	<b><u>288</u></b>	<b><u>320</u></b>
<b><u>30</u></b>	<b><u>432</u></b>	<b><u>504</u></b>	<b><u>576</u></b>	<b><u>648</u></b>	<b><u>720</u></b>
<b><u>40</u></b>	<b><u>672</u></b>	<b><u>784</u></b>	<b><u>895</u></b>	<b><u>1,008</u></b>	<b><u>1,120</u></b>
<b><u>50</u></b>	<b><u>912</u></b>	<b><u>1,064</u></b>	<b><u>1,216</u></b>	<b><u>1,368</u></b>	<b><u>1,520</u></b>
<b><u>60</u></b>	<b><u>1,152</u></b>	<b><u>1,344</u></b>	<b><u>1,536</u></b>	<b><u>1,728</u></b>	<b><u>1,920</u></b>
<b><u>70</u></b>	<b><u>1,392</u></b>	<b><u>1,624</u></b>	<b><u>1,856</u></b>	<b><u>2,088</u></b>	<b><u>2,320</u></b>
<b><u>80</u></b>	<b><u>1,632</u></b>	<b><u>1,904</u></b>	<b><u>2,176</u></b>	<b><u>2,448</u></b>	<b><u>2,720</u></b>
<b><u>90</u></b>	<b><u>1,872</u></b>	<b><u>2,184</u></b>	<b><u>2,496</u></b>	<b><u>2,808</u></b>	<b><u>3,120</u></b>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kN/m<sup>2</sup>, 1 pound = 0.454 kg.

a. Wind uplift forces are based on 24-inch spacing of roof trusses or rafters. For spacing other than 24 inches, forces shall be adjusted accordingly.

b. Interpolation is permitted for intermediate values of wind uplift pressures and roof widths.

c. The rated capacity of approved tie-down devices is permitted to include up to a 60-percent increase for wind effects where allowed by material specifications.

d. Figure R301.2(4) and Table R301.2(2) shall be used in determining the design wind load.”

**7. Chapter 10, Chimneys and Fireplaces, shall be amended as follows:**

**i. In Section R1001.15, Chimney clearances, Exception 3, “12 inches” shall be deleted and “6 inches” shall be inserted.**

ii. In Section R1003.12, Fireplace clearance, Exception 3, “12 inches” shall be deleted and “6 inches” shall be inserted.

8. Chapter 11, Energy Efficiency, shall be deleted in its entirety.

9. Chapter 12, Mechanical Administration, shall be amended as follows:

i. Section M-1202, Existing Mechanical Systems, shall be deleted in its entirety.

10. Part VI, Fuel Gas, shall be amended as follows:

i. In Section G2402.3, Terms defined in other codes, “ICC Electrical Code, International Building Code, International Fire Code, and International Plumbing Code” shall be deleted and “electrical, building, fire protection, and plumbing subcodes” shall be inserted.

ii. Section G2403, entitled “General Definitions” shall be amended as follows:

(1) The definition “code” shall be deleted.

(2) The definition of “code official” shall be deleted and the following shall be inserted: “For the purpose of this subcode, the term ‘code official’ shall mean the appropriate subcode official as required by N.J.A.C. 5:23-3.4.”

(3) In the definition of “labeled,” “authority having jurisdiction” shall be deleted and “construction official” shall be inserted.

(4) In the definition of “listed,” “authority having jurisdiction” shall be deleted and “Uniform Construction Code (N.J.A.C. 5:23)” shall be inserted.

iii. Section G2404.5, Repair, shall be deleted in its entirety.

iv. In Section G2408.1, General, the second paragraph shall be deleted in its entirety.

v. Section G2409, Clearance Reduction, shall be amended as follows:

(1) In Section G2409.4, Central heating boilers and furnaces, “G2409.4.1 through G2409.4.7” shall be deleted and “G2409.4.1 through G2409.4.5 and G2409.4.7” shall be inserted.

(2) Section G2409.4.6, Unlisted central heating furnaces, shall be deleted in its entirety.

vi. Section G2411.2, Liquefied petroleum gas storage, shall be amended as follows: “Delete in its entirety Section 3-2.5, entitled ‘Installation of Containers on Roofs of Buildings’ in NFPA 58, 1998 Edition. The installation of LP Gas containers on roofs of buildings shall be strictly prohibited.” shall be inserted after the first sentence.

vii. Section G2413.3, Other materials, shall be deleted in its entirety.

viii. In Section G2426.5.5, Inspection of chimneys, “clear and free of obstructions” shall be deleted and “inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(c)” shall be inserted. In the same section, the exception shall be deleted in its entirety.

11. Part VII, Plumbing, shall be deleted in its entirety. Plumbing requirements under the scope of this subcode shall be regulated by the plumbing subcode.

12. Part VIII, Electrical, shall be deleted in its entirety. Electrical requirements under the scope of this subcode shall be regulated by the electrical subcode.

13. The Appendices shall be amended as follows:

i. In Appendix A, Sizing and Capacities of Gas Piping, at Letters (e) and (d), “authority having jurisdiction” shall be deleted and “construction official” shall be inserted.

ii. Appendix D, Recommended Procedure for Safety Inspection of an Existing Appliance Installation; Appendix E, Manufactured Housing Used as Dwellings; and Appendix F, Radon Control Methods, are deleted in their entirety.

iii. In Appendix G, Section AG102.1, General, the definition of “swimming pool” shall be deleted and the following shall be inserted: “Any structure intended for swimming or recreational bathing that contains water, provided that these regulations shall not be applicable to any pool less than 24 inches (610 mm) deep or having a surface area less than 250 square feet (23.25 m<sup>2</sup>). This includes in-ground, above-ground, on-ground swimming pools, hot tubs, and spas.”

iv. In Appendix G, Section AG105.2, Outdoor swimming pool, Provision 9 shall be deleted in its entirety.

v. Appendix H, Patio Covers; Appendix I, Private Sewage Disposal; and Appendix J, Existing Buildings and Structures, shall be deleted in their entirety.

#### 5:23-12.12 Special safety equipment

(a) On all existing elevators, a space between the elevator hoistway door and the car door or gate shall comply with the requirements of Rule 204.4e of ASME A17.1-1990. Where the space exceeds the maximum distance, a space guard shall be installed to minimize the gap. Sight guards shall be installed along with the space guards on horizontally sliding type hoistways.

1. - 2. (No change)

(b) In buildings containing more than one elevator device, each such device shall be identified according to [BOCA Rule 3003.3 and] ASME A17.1 referenced in the building subcode.

(c) - (d) (No change)